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**Polycopié de cours destiné aux étudiants de licence LMD
(L1) de la spécialité informatique**

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Table of contents

Preface..... 8

Part one :

A. Computer Science based Lectures

1. Computer (General Introduction).....12

1.1. Hardware

1.1.1. Central Processing Unit

1.1.1.1. Processing.....13

1.1.1.1.1. Control unit.....13

1.1.1.1.2. Arithmetic logic unit ALU.....13

1.1.1.1.3. Registers14

1.1.2. The main memory.....14

1.1.3. Peripherals.....14

1.1.3.1. storage devices.....	14
1.1.3.2. input devices.....	14
1.1.3.3. output devices.....	14
1.2. software.....	14
1.2.1. Operating system	
1.2.2. compiler.....	15
1.2.3. applications	
1.2.4. Exercise one.....	15
1.2.5. Exercise two.....	16
<u>B. A language based lecture</u>	
1. French English False Friends.....	17
1.1. Definition(table of examples).....	17-18
1.2. Exercise.....	19
<u>C. Oral expression</u>	
	19

Part Two

A. Computer Science based Lectures

1. Computer languages.....	19
2. Definitions of some computer science terms	
Figure	21

Computer science based lecture

2.1.Backup.....	21
2.2. Configuration.....	21
2.3. Control bus.....	21
2.4. A Computer Virus	21
2.5. Control Unit.....	22
2.6. Homework	22

B. Language based lecture

1. Verb Collocations Part One.....	22
2. Verb Collocations Part Two.....	22

C. Oral Expression

Topic: Responsibility and leadership.....23

Part Three

A. Computer Science based Lecture

- 1. Types of Operating Systems.....23
 - 1.1.Real-time operating system.....23
 - 1.2.Single-user, single task.....24
 - 1.3.Single-user multi-tasking.....24**
 - 1.4.Multi-user.....25
 - 1.5.Time-sharing.....25

B. Language based Lecture

- 1. Possessive Adjectives and Reflexive Pronouns.....25
- 2. Exercises25
- 3. Confusing words.....26
- 4. Exercise28

C. Oral expression.....28

Part Four

A. Computer science based lecture

1. Difference between Web Server and Web Browser.....29

B. A language based lecture

A. Choosing the right preposition.....30

1. Exercise31

B. Tips for good paragraph writing.....31

1. Exercise 1.....32

2. Exercise 2.....32

Part Five

A. Computer science based lecture33

1. Cookies and operating systems.....33

1.1. Cookies33

1.2. Linux.....33

B. A Language based Lecture

1. Homophones.....33

1.1. Examples.....33

Part six:

A. Computer science based lecture34

1. Application

B. A Language based Lecture

1. Adjectives that look like adverbs.....36

1.1.Exercise36

Part seven:

A. Computer science based lecture37

1. ALGORITHM.....37

2. Computability38

B. A Language based Lecture

1. British English and American English (spelling differences)

Part eight39

A. Computer science based lecture

1. COMPUTER GRAPHICS

1.1.Raster.....39

1.2. Vector.....39

B. A Language based Lecture

1. British English and American English (vocabulary differences).....40

Part nine:

A. Computer science based lecture

1. Programming.....41

2. Protocol41

3. Proxy.....41

4. ADSL.....41

B. A Language based Lecture

1. Homework.....43

Cite all the homographs that you know

Part ten:

A. Computer science based lecture

1. Memory in a Flash.....	43
2. Exercise.....	43
3. Exercise.....	43
Références bibliographiques	45

Preface

L'objectif de ce document pédagogique est de permettre aux étudiants de première année licence LMD en informatique d'acquérir certaines notions fondamentales en informatique, et cela pour une meilleure maîtrise des concepts fondamentaux appliqué dans le domaine de « Computer Science ».. En outre, dans le polycopié, les cours se focalisent principalement autour de l'introduction à l'informatique en Anglais. La langue anglaise est devenue très importante. Pour cela, après chaque trois séance, on fait « **Oral Expression** » pour que l'étudiant puisse avoir au minimum les termes basiques pour pouvoir s'exprimer facilement. Cette séance est consacrée à «**Speaking Skills (vocabulary, fluency, pronunciation, grammar)** ».

Le polycopié est répartie en trois chapitres: apprendre « **Introduction to Computer Science** » des termes techniques dans la spécialité permet au étudiant d'expliquer quelques notions en utilisant une langue internationale (l'Anglais).

Le présent polycopié contient des cours de grammaires et de vocabulaire, celles qui sont vraiment importante et que l'étudiant pourrait en tirer des points avantageux et intéressants pour ne pas répéter les erreurs les plus fréquentes concernant l'expression orale et l'expression écrite.

. Les étudiants sont supposés avoir une formation suffisante sur les notions basiques (en Anglais) dans leur spécialité

Part one :

A. Computer Science based Lectures

1. Computer (General Introduction)

It is world-widely known that a computer is an electronic machine that can accept input, process data and produce results (output) in a certain format.

At the outset, information is entered into the memory of the computer. Once the computer is run, the computer triggers a set of instructions and starts the processing of the data. After that, the result can be seen on the display (screen) or in a printer.

In the field of computer science, there is a great emphasis on two pivotal parts of the computer system: hardware and software.

1.1. Hardware

This part constitutes the computer's most prominent part. Hardware refers to all the physical part of the computer. All the electronic or mechanical parts that we can see or touch are called hardware.

The three hardware sections are : the central processing unit(CPU), main memory and peripherals.

1.1.1. Central Processing Unit

“Perhaps the most influential component is the central processing unit. Its function is to execute program instructions and coordinates the activities of all the other units. In a way, it is “the brain” of the computer.”¹

1.1.1.1. Processing:

The element that puts the mission in motion is inevitably the central processing unit, also called the processor. No wonder, it is the gist of the computer. All that concerns the executions of program instructions and the coordination of activities is strictly related to the processor.

The three primary parts that make the processor: the Control Unit, the Arithmetic Logic Unit (ALU) and the Registers.

1.1.1.1.1. The **control unit** is responsible for the examination of the instructions of the user’s program and the interpretation of instructions. Additionally, it causes the rest of the components and the circuits to execute the functions specified.

1.1.1.1.2. The **arithmetic logic unit (ALU)**: it is the place where all the mathematical calculation (addition, subtraction, division and multiplication) and logical operations (determining which of the two numbers is greater) are performed.

¹Santiago Remacha Esteras, Infotech : English for comuter users, p. 8.

1.1.1.1.3. The **registers** represent the units of memory that are used to store and control data.

1.1.2. The main memory

“The main memory holds the instructions and data which are being processed by the CPU.”²

1.1.3. Peripherals

“Peripherals are the physical units attached to the computer. They include storage devices and input/ output devices.”³

1.1.3.1. Storage devices: it is the place where data and prgmas are stored permanently, for example the hard drive.

1.1.3.2. Input devices are all the elements that we use to enter data into the computer’s memory, such as, the keyboard and the mouse.

1.1.3.3. Output devices refer to all the components that present the results produced by the computer system. For instance, the printer and the display are output devices. (it allows us to have the information in a readable form)

1.2. Software

This part is as pivotal as the hardware in the computer system. It is considered as the fuel for this machine. In fact, this part holds the three important groups without which the computer cannot run. The three groups of programs are the following: the **operating system**, the **compilers** or the translators and the **users’ programs**.

² Ibid., p. 8.

³ Santiago Remacha Esteras, op. cit., p.8.

1.2.1. The **operating system** here there is an allusion to all the programs that control all the activities in the computer. The supervision the observation and the verification of the several operation in the computer system if perform by the operation system. The coordination of input/output operation and program execution are present in the OP.

1.2.2. The **compiler** or the translator is defined as a program with which the commands as well as instructions written in a high level language are translated. The following definition provided by Evans explains the essence of this program seamlessly:

. A *compiler* is a computer program that generates other programs. It translates an input program written in a *high-level language* that is easier for humans to create into a program in a machine-level language that can be executed by the computer. Admiral Grace Hopper developed the first compilers in the 1950s.⁴

1.2.3. Application programs (also called user programs): these languages are written in a high-level language. In fact, they are present in order to meet diverse purposes. Fo example, Excel.

Exercise one⁵:

Match the words (1-9) with the correct meanings (a-i).

1. Software	a. The brain of the computer
-------------	------------------------------

⁴ David Evans, *Introduction to Computing : Exploration in Language, Logic and Machines*, p. 38.

⁵Santiago Remacha Esteras, op. cit., p. 9.

<ul style="list-style-type: none"> 2. Peripherals 3. Main memory 4. Hard drive(also known as hard disk) 5. Hardware 6. Input 7. Ports 8. Output 9. Central processing unit 	<ul style="list-style-type: none"> b. Physical parts that make up a computer system c. Programs which can be used on a particular computer system d. The information which is presented to the computer e. Results produced by the computer f. Inputs devices attached to the CPU g. Section that holds programs and data while they are executed or processed h. Magnetic device used to store information i. Sockets into which an external device may be connected
---	---

Exercise two⁶:

Match each word from column A(1-8) with its partner from column B (a-h) to make a computing term.

B

- a. Code
- b. Key
- c. Drive
- d. Supply
- e. Card

⁶ ERIC H. GLENDINNING, John McEwan, *BASIC ENGLISH FOR COMPUTING*, p.25.

- f. Chip
- g. Memory
- h. disk

1. Memory
2. Power
3. Function
4. Expansion
5. Bar
6. Floppy
7. cache
8. Disk

B. A language based lecture

French English False Friends

1. Definition

In the linguistic field, false friends can be defined as words that are spelled or pronounced the same way. Indeed, it is quite central to get acquainted with these words so as to avoid the common mistakes. The following words constitute good examples:

French faux ami	English translation	English look-alike	French translation of look-alike
Sensible	Sensitive	sensible	Raisonnable

Stage	Training	Stage	Scene
Chair	Flesh	Chair	Chaise
Coin	Corner	Coin	Piece de monnaie
Raisin	Grapes	Raisin	Raisin sec
Veste	Jacket	Vest	Gillet
Quitter	Leave	Quit	Ab
Blessier	To wound	Bless	Benir
Agenda	Dairy	agenda	Order du jour
Tissue	Fabric	tissue	Mouchoir en papier
Rester	Stay	Rest	Se reposer
Actuel	Current	actual	Réell
Cours	Lecture, class	course	Stage
Assister à	Attend	assist	Aider

2. **Exercise:** give some example about French English false friends.

C. Oral expression: This class is fully devoted to speaking and speaking skills (vocabulary, fluency, pronunciation, grammar)

The topic: Advertising

Questions in the debate:

- 1) What are the methods you can implement when advertising for your product (for example: a computer)?
- 2) In your opinion, what are the criteria for a good advertisement?
- 3) What is the element that appealed you in an advertisement for computer of a certain brand?

Part Two:

A. Computer Science based Lectures

1. Computer Languages

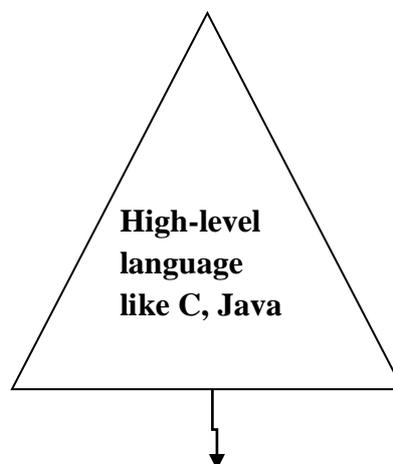
Unlike humans, the computer cannot understand the language that we use to communicate. As a machine, the only language that it can understand is machine code.

With the intention of communicating instructions to the computer, symbolic languages are used. In order to facilitate the intercommunication between the different computer elements, high-level languages were niftily designed by software developers. the most common computer high-level languages are: **C, C++, Java, etc.)**

C was developed in the 1980s at AT&T. it is used to write system software, graphics and commercial applications. C++ is a version of C which incorporates object-oriented programming: the programmer concentrates on a particular things (a piece of text, a graphic or a table, etc.) and gives each object functions which can be altered without changing the entire program.⁷

“**Java** is a computer language similar in structure to C++. Although Java is a general-purpose programming language, it is most often used for creating applications to run on the Internet, such as Web servers.”⁸

No wonder, a miscellaneous array of computer programs are written in high-level languages, and thus they have to be translated into a machine code. The element that is responsible for translating is the **compiler** or the **interpreter**. In fact, it translates the source code into object code. The following figure explains it well:



⁷ Santiago Remacha Esteras, op. cit.,p 121.,

⁸Harry, Henderson, *ENCYCLOPEDIA OF COMPUTER SCIENCE and TECHNOLOGY*, P. 254.

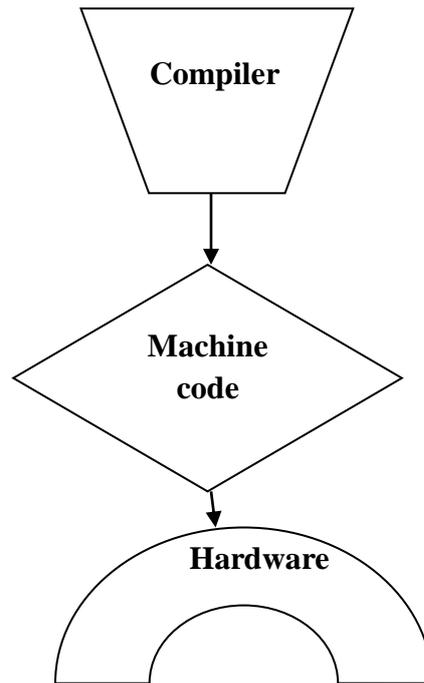


Figure 2

2. Definitions of some computer science terms

A. Computer science based lecture

Here are some definitions of some computer science terms that we use frequently:

- 2.1. Backup:** “a copy of a piece of data or program taken in case something happens to the data or to the disk on which the original data is stored.”⁹
- 2.2. Configuration:** “the particular hardware elements and how they are interconnected in a computer system or network.”¹⁰
- 2.3. Control bus:** “a signal route within a computer dedicated to the sending of control signals.”¹¹
- 2.4. A computer virus:** “an unwanted program that has entered your system without you knowing about it. It has two parts, which I’ll call the infector and the detonator”¹²

⁹ Boeckner , Keith , Brown , P. Charles . *Oxford English for Computing*, p. 199

¹⁰ Ibid, p. 201

¹¹ Ibid, p. 201

¹² Ibid, p.122

2.5. Control unit “of the two main components of the CPU. It transmits co-ordinating control signals and commands to the computer.”¹³

2.6. Homework: Give the definition the following terms: cabling, bar code, information, digital and application

B. Language based lecture

Verb Collocations

Part 1

DO	MAKE	HAVE	TAKE
shopping	A wish	lunch	A taxi
housework	A mistake	A hair cut	A chance
cooking	Lunch	A baby	A break
washing	A difference	A rest	A look
favour	A noise	A seat	An exam
My hair	An effort		A test

Verb Collocations part 2

come	Go	Get	Keep
first	astray	A job	A dairy
close	crazy	angry	A promise
prepared	away	married	An appointment
To a compromise		frightened	calm
To a decision		pregnant	control
To an agreement		started	quiet
		The message	The change

¹³ Ibis, p.201

		upset	
		worried	

Exercise

- Build sentences using **do** and **make** in the same sentence.
- Give other verb collocations of **come**, **go**, **get** and **keep**.

C. Oral expression

Topic: Responsibility and leadership

Questions in the debate:

- 1) Do you like to be responsible?
if yes, say why.
If no, say why
- 2) Do you enjoy leading a group workshop, a project or a team?
- 3) Say what is good about being a leader?

Part Three

A. A Computer Science based Lecture

1. Types of Operating Systems

The fact that there are sundry types of computers to control and several sorts of applications to support necessitates the presence of divergent types of operating systems. Here are some:

1.1. Real-time operating system

Real-time operating systems are used to control machinery, scientific instrument and industrial systems. This operating system has very little user-interface capacity, and no end-user utilities, as the system is a 'sealed-box'

when delivered for use. A very important part of a real-time operating system is managing the resources of the computer so that a particular operation executes in precisely the same amount of time every time it occurs. The response time of real-time operating system is very quick.¹⁴

1.2. Single-user, single task

As the name implies, this operating system is designed to manage the computer so that one user can effectively do one thing at a time. The OS for palm handheld computers is a good example of a modern single-user, single task operating system.¹⁵

1.3. Single-user multi-tasking

This is the type of operating system most people use on their desktop and laptop computers today. Both Windows and the Macintosh OS are examples of operating systems that will let a single user have several programs in operation at a time. For example, it is possible for a Windows user to write a letter in a word processor while downloading an image file from the internet while printing while music plays..., all at one time.¹⁶

1.4. Multi-user

A multi-user operating system allows many different users to take advantage from the computer's resources simultaneously. The operating system must make sure that the requirements of the various users are balanced, and that each of the programs they are using has sufficient and separate resources so that a problem with one user does not affect the

¹⁴ SEEMA BHATNAGA, *TEXTBOOK OF COMPUTER SCIENCE FOR CLASS XI*, p. 60.

¹⁵ *Ibid*, p. 60.

¹⁶ SEEMA BHATNAGA, *op. cit.*, p. 61.

entire community of users.¹⁷ Unix can be considered as an example of a multi-user operating system.

1.5. Time sharing

Such an operating system is meant for the computer system in which a number of simultaneous users are there. Each user is given a trivial amount of time ... in which he/she processes interactively or conversationally.¹⁸

B. A Language based Lecture

1. Possessive Adjectives and Reflexive Pronouns

As the pronouns are really confusing, it is quite necessary to be acquainted with them and to make the difference between the divergent groups of pronouns.

Possessive adjectives are: my, your, his, her, its, their, our, your.

Note: they are called adjectives because of the fact that they have the same position as adjectives.

Reflexive Pronouns are: myself, yourself, himself, herself, itself, ourselves, yourselves, themselves.

2. Exercise one:

Put all the previous possessive adjectives and reflexive pronouns in sentences that are grammatically and meaningfully correct.

Exercise two:

“1. She's not his friend, she's (*my/mine*).

2. Robert didn't drink his own coffee. He drank (*her/hers*).

¹⁷SEEMA BHATNAGA, op. cit p. 61.

¹⁸ SEEMA BHATNAGA, op. cit, p. 61.

3. That is one of (*hers/her*) friends.
4. His neighborhood is safe, while (*my/mine*) neighborhood isn't.
5. His neighborhood is safe, while (*my/mine*) isn't.
6. Did (*your/yours*) mother call?
7. I don't know (*them/their*) very well.
8. I don't know (*them/their*) daughter very well.
9. I talked to (*my/me*) grandmother for three hours last night.
10. I think I got my notes mixed up with (*your/yours*)."¹⁹

3. Confusing words

accept: to agree to receive or do

except: not including

adverse: unfavourable, harmful

averse: strongly disliking; opposed

¹⁹ <https://www.learnenglishfeelgood.com/possessive-pronouns-adjectives1>

advice: recommendations about what to do

advise: to recommend something

affect: to change or make a difference to

effect: a result; to bring about a result

aisle: a passage between rows of seats

isle: an island

all together: all in one place, all at once

altogether: completely; on the whole

along: moving or extending horizontally on

a long: referring to something of great length

aloud: out loud

allowed: permitted

altar: a sacred table in a church

alter: to change

amoral: not concerned with right or wrong

immoral: not following accepted moral standards

appraise: to assess

apprise: to inform someone

assent: agreement, approval

ascent: the action of rising or climbing up

aural: relating to the ears or hearing

oral: relating to the mouth; spoken

4. Exercise

Cite other confusing words that you know

C. Oral expression

Topic: Choosing Computer Science over other Domains

Questions in the debate:

- 1) What is the element that impelled you to opt for computing ?**
- 2) Is there anything distinctive in this field?**
- 3) How can you be creative I this sphere?**

Part Four:

C. Computer science based lecture

2. Difference between Web Server and Web Browser

Web server and web browser are terms which are commonly used for website. The basic purpose is to develop a platform for internet web directory so that any user can anytime access any kind of website.

The major difference between them is their functions and how they perform them.

Web server is a computer system which provides the web pages via HTTP. IP address and a domain name is essential for every web server. Whenever you insert a URL or web address into your browser, this latter sends request to the web address where domain name of your URL is already saved. Then, the server collects all information of your webpage and sends them to the browser.

You see the result in a form of a webpage on your browser.

Give examples about some web servers that you know.

D. A language based lecture

1. Choosing the right preposition

The following are some of the common mistakes that the students make in what concerns prepositions.

“-Accuse of, not *for*.

Don't say: she **accused** the man of stealing. /Say: she **accused** the man **of** stealing

-Accustomed to, not *with*

Don't say: I'm **accustomed** with hot weather. / say: I'm **accustomed to** hot weather.

Note: also **used to**: He is **used to the heat**.

-Afraid of, not from

Don't say: Laura is **afraid** from the dog. / say: Laura is **afraid of** the dog.

-Aim at, not on or against

She aimed on the target. / say: she aimed at the target.

-Angry with, not against

Don't say: the teacher was angry against him. / Say: the teacher was angry with him.

Note: we get **angry with** a person but at a thing: he was **angry at** the weather.

-Anxious about, not for. Don't say: they're anxious for his health. / Say: they're **anxious about** his health.

-Arrive at, not to

Don't say : we arrived to the village. / We e arrived at the village.

Note: Use **arrive in** with countries and large cities. Mr Smith has arrived in London.

-Disappointed by, about or at, not from.

-by, about, at

Don't say: phillipa was disappointed from the low mark she got in the test. / Say Phillipa was **disappointed by/ about/at** low mark she got in the test.

-in, with

Don't say: Jane was disappointed from her son. / Say: Jane was **disappointed with/in** her son.

Dressed in, not with.

Don't say: the woman was dressed with black. /Say: the woman was **dressed in** black."²⁰

1.1.Exercise one:

Complete with the correct preposition.

Joana is a very ambitious girl. She lives in a very cold place in the world but she is accustomed..... the cold weather. Thus, she is not anxious..... her health. Additionally, she is always aimingher targets. She is absorbed.....her work. Joana never wears colors, she is often dressed.....black. She is a very kind person and she rarely gets angrypeople.

3. Tips for good Paragraph Writing

1. At the outset, you should opt for a very enticing topic sentence (the main idea of the paragraph) that reveals the idea around which the paragraph is unified.

Note: It is known that all that is introductory either makes the reader intensely eager to read what is next or make him or her stop reading immediately.

2. You must select the most uncommon and highly expressive words in order to achieve uniqueness and originality in paragraphs. In other words, one has to avoid go over the same verbs and adjectives.

²⁰Fitikides,, B.A. ,F.I.L, *Common Mistakes in English and Excercices*, p. 1, 2,3,4.

3. The sentences must complete the meaning of one another. Adding to that, consistency must find room in your paragraph.
4. Use transition words in order not to make it too plain.
5. Do not make the sentences too long. Construct sentences that are meaningfully and grammatically correct.

3.1.Exercise 1

Write a paragraph about “ego” using all the previously stated tips.

.....

.....

.....

.....

.....

3.2.Exercise 2

Write a paragraph using the following computer science terms:

**Antiglare, configuration, installation
malfunction, control unit, program, cable, input
device, CPU, compiler, Java, memory, arithmetic
unit, display.**

Part five :

C. Computer science based lecture

2. Cookies and operating systems

2.1. COOKIES

Cookies is world widely referred to as a message that the web server gives to a web browser. This message is stored by the browser in a text file. Then, the message is sent back to the server when the browser requests a page from the server.

Source

The name cookies derives from Unix objects called magic cookies. These are attached to a user or program and they change depending on the areas entered by a user or a program.

An operating system is usually identified as the instructions that manage the electronic parts of the computer and thus it permits the programs to run.

2.2. Linux

Linux is defined as an operating system which is designed for computers. It is a Unix-like operating system.

Try to cite all elements that distinguish Linux from other operating systems.

What is the difference between Windows and Linux ?

D. A Language based Lecture

2. Homophones

Homophones are words that are pronounced the same but are spelled differently and differ in meaning.

Note: We have to be acquainted with homophones so that we can avoid making terrible mistakes.

2.1.Examples:

Flour	Flower
Fare	Fair
Heel	Heal
Grate	Great
Cite	Site
Herd	Heard
Hey	Hay

Hymn	Him
Bail	Bale
Bate	Bait
Dye	Die
hare	Hair
hire	Higher
hall	Haul
holly	Wholly
faze	Phase
knot	Not
waste	Waist
alter	altar
stare	Stair
right	Write
tale	Tail
which	Witch
plain	Plane
meat	Meet
knight	Night
steel	steal
sun	son

Part six:

C. Computer science based lecture

2. Application

It is usually referred to as a type of software that allows the user to perform specific tasks.

There are desktop applications and mobile applications.

When we open an application, it runs inside the **operating system** until we close it. Adding to that, when we have more than one application open at the same time, it is known as **multi-tasking**.

Desktop applications

There are numerous and sundry desktop applications, and they are usually classified into many type.

Some are **full featured** (like Microsoft Word), while others may only do **one or two things** (like calendar applications).

Cite some applications, say how these applications work and what is their importance within the computer

Application 1

.....
.....

Application 2

.....
.....

Application 3

.....
.....

D. A Language based Lecture

2. Adjectives that look like adverbs

For example, there are adjectives that end in **-ly** and they usually get mistaken for adverbs

Here are some examples:

Brotherly

Friendly

Costly

Cowardly

Elderly

Fatherly

Godly

Goodly

Homely

Holy

Lonely

Lovely

Lively

Motherly

Nightly

Ghostly

Saintly

Sisterly

Silly

Timely

Ugly

unworldly

Some can be adjectives and adverbs at the same time

Daily

weekly

monthly

yearly

fortnightly

2.1.Exercise

Put all the previously cited adjectives in sentences that are meaningfully and grammatically correct.

Part seven:

C. Computer science based lecture

1. ALGORITHM

A procedure is a description of a process. A simple process can be described just by listing the steps.

The list of steps is the **procedure**

The act of following them is the process

A procedure that can be followed without any thought is called a **mechanical procedure**

An algorithm is a mechanical procedure that is guaranteed to eventually finish.

A **computer** is a machine that can:

1. Accept input.

2. Execute a mechanical procedure, that is, a procedure where each step can be executed without any thought.
3. Produce output. Output could be data displayed to a human.

2. Computability

A problem is computable if it can be solved by some algorithm; a problem that noncomputable cannot be solved by any algorithm.

(from Introduction to Computing Explorations in Language, Logic and Machines, David Evans)

Question:

Cite a problem that is **noncomputable** and cannot be solved by any algorithm.

D. A Language based Lecture

2. British English and American English (spelling differences)

British English	American English
Endeavour	Endeavor
Apologise	Apologize
Modelling	Modeling
Centre	Center
Inquiry	Enquiry
Towards	Toward
Labour	Labor
Colour	Color
Honour	Honor
Favourite	Favorite
Grey	Gray
Splendour	Splendor
Vigour	Vigor
Prise	Prize
Metre	Meter

Litre	Liter
Fibre	Fiber
Theatre	Theater
Travelled	Traveled
Traveller	Traveler
Counselling	Counseling
Equalling	Equaling
Signalling	Signaling
Fuelled	Fueled
Quarrelling	Quarreling
Minimise	Minimize
Civilise	Civilize
Rumour	Rumor
Defence	Defense

E. Give other differences that you know.

Part eight

C. Computer science based lecture

1. COMPUTER GRAPHICS

Computer graphics can be defined as pictures and drawings that are produced by computer. They are classified into two main categories:

- 1.1. **Raster** graphics, or bitmaps, are stored as a collection of pixels. The sharpness of an image depends on the density of pixels (it can be referred

to as resolution). Paint and photo-editing programs like Adobe Photoshop focus on the manipulation of bitmaps.

- 1.2. **Vector** graphics matches to the representation of images through the use of geometric objects, such as lines, curves and polygons based on mathematical equations. They can be scaled without losing quality. Additionally, drawing programs like Adobe Illustrator can handle vector data.

Exercise 1

Match the words (1-6) with the definitions (a-f).

1. Resolution
 2. Jagged
 3. Filters
 4. Wireframe
 5. Rendering
 6. Fractals
-
- a. Special effects that can be applied to pictures
 - b. A technique that generated realistic reflections, shadows and highlights
 - c. Geometrical figures with special properties
 - d. Irregular or uneven
 - e. The number of pixels in an image
 - f. The drawing of a model by using features like edges or contour lines²¹

D. A Language based Lecture

2. British English and American English (vocabulary differences)

British English	American English
Autumn	Fall
Coriander	Cilantro
maize	Corn

²¹ Santiago Remacha Esteras, op. cit., p.32

football	soccer
curtains	drapes
Flat	Apartment
Wardrobe	Closet
Nappy	Diaper
Trousers	Pants
holiday	Vacation
aeroplane	Airplane
timetable	Schedule
university	College
biscuit	Cookie
jumper	Sweater
postbox	Mailbox
lift	Elevator
ground floor	First floor
lorry	Truck
crisps	Potato chips
pavement	Sidewalk
sweets	Candy
handbag	Purse
public toilet	Restroom
torch	Flashlight
washbasin	Sink

Give other differences that you know.

Part nine:

C. Computer science based lecture

1. Programming

Programming can be defined as the act of writing instructions that make the computer do something useful. It can be referred to as an intensely creative activity. It necessitates aspects of art, engineering, and science.

Programming the process of writing a program using a computer language.

2. Protocol

“a set of rules which determine the formats by which information may be exchanged between different systems.”²²

3. Proxy

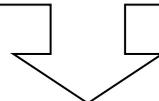
A computer server which controls the traffic between the internet and a private network.

4. ADSL

“Asymmetric Digital Subscriber Line. A broadband communication technology designed for use on telephone lines; it allows a single phone connection to be used for both internet service and voice calls at the same time.”²³

(Infotech, Santiago Remacha Esteras)

What does
Programming
involve



1.
2.
3.
4.

²² Santiago Remacha Esteras, op. cit.,p 163
²³ Santiago Remacha Esteras, op. cit.,p.156.

D. A Language based Lecture

2. Homework

Cite all the homographs that you know

Part ten:

B. Computer science based lecture

1. Memory in a Flash

Among the well known types of memories, we have the **volatile** and the **non-volatile** memory.

The volatile can be defined as a type o memory hat oes not retain information when the power is turned off. For instance, RAM. Unlike RAM, flash memory is a non-volatile. In other words, it retains the information stored when he power is turned off.

2. Exercise

Match these words (1-5) with the definitions (a-e).

1. formatted
 2. directory
 3. read/write head
 4. head crash
 5. back up
-
- a. a file system that defines the structure for keeping track of the files
 - b. the part of a drive that reads and records data on a disk
 - c. to make a copy of data or software in case the original disk is damaged
 - d. initialized; when the tracks and sectors on magnetic disks are set
 - e. a serious disk malfunction; when the read/write head touches the rotating disk.²⁴

²⁴ Santiago Remacha Esteras, op. cit.,p 50

3. Exercise

Find the definitions of the words (1-5) in the list (a-e)

1. Hypertext
 2. Hypermedia
 3. Streaming
 4. Webcast
 5. Video editing
-
- a. The process of manipulating video images
 - b. Text with links which take you to other pages
 - c. A technique
 - d. For playing sound and video files while they are downloading
 - e. a live event broadcast over the internet
 - f. a form of enriched multimedia which allows an interactive and dynamic linking of visual and audio elements

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