

Basic Programming Concept

In this unit you are going to learn about

- basic programming concepts
- programming strategies
- some dangers of the Internet
- using a computer comfortably

Lesson 1 Warm-Up

Quite simply, programming means creating a set of instructions for completing a specific task.



- ❖ First, think about what your own memory is a 'programme' for in your everyday life?
- ❖ Then look at the actions below. Put a tick (✓) next to those activities that your memory is 'programmed' for.

making the bed
 free-time activities
 studying/doing homework
 putting on a uniform
 meal times
 arranging a meeting/appointment

An example of memory 'programming':
making a sandwich.

Preparation:

cut some bread



get some cheese



prepare some tomato



If you don't follow the sandwich-making instruction in the correct order, what will happen? Think about it.

*Programming actions means avoiding a mess (dağınıklık) or chaos (kaos).

*In computing, we use a set of instructions or directives-called 'programming languages'. Both the programmer and the computer operating system understand these.

Activity 1

Write the programming languages you already know in the circle below.

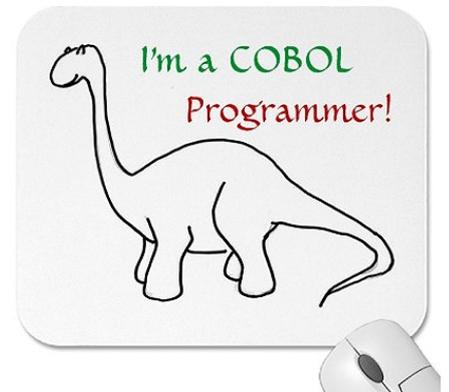
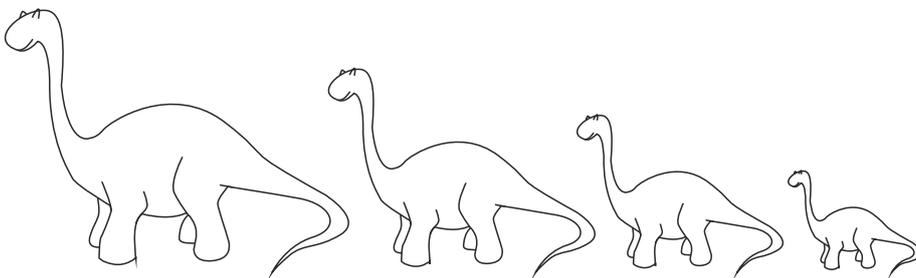
Activity 2

First read the short texts about programming languages on pages 80-82. Then fill in the time-line below. Write the correct programming language in the spaces above the different dates.

1950s	1970s
early 1960s	1990s
late 1960s	2000s

Here are a few common programming languages:

1 COBOL(Common Business Oriented Language)



This was one of the oldest programming languages. It was designed in 1959 for business, finance and administrative (idari) system for companies and governments.

2 BASIC(Beginner's All Purpose Symbolic Instruction Code)

This was a general-purpose (amac), high-level programming language designed in 1964. It was easy to teach, learn and use.

```
Private Sub Form_Load()
Print 'Hellow World'
End Sub
```

```
program
Hellow World (output);
begin
WriteLn (Hellow World!);
end.
```

3 Pascal

This was a popular (etkileyici) programming language a designed in the late 1960s.

4 c

This was a structured (yapısal) programming language designed in 1972. It was later developed into C++.

```
#include <iostream.h>
main()
[cout <'Hello World!'>endl;
return0;]
```

5 Java

This is an interpreted (yorumlanmış), multifunctional (çok fonksiyonlu) and productive (üretken) language designed in 1994.



```
class Hello Word [static public
void main (String args)]
[System.out.println(Hello)World!;]
```

6

Visual Basic is a good choice for those who love to develop apps in Windows.

7

JavaScript has nothing to do with Java. It is another scripting language, mainly used to enhance/+Turkish/web-browser.

8

Pearl and Ruby (Kind out more about these online)



As a programmer, you will need to know at least one major language like Java or C.

If you want to be a good programmer, you should be good at English and Mathematics. Do you know why? Because you should know about algorithms (algoritma), conditional language (kosal ifade) and all the other commands for programming. And don't forget that in computing and web design the main language is English!!!

Is there anyone here who wants to be a web-programmer? You may want to be one after you read about Mark Zuckerberg.



Activity 3

First read the text below. Then complete the one word underneath it.



Mark Elliot Zuckerberg is an American computer programmer. He is best known for helping to create the most famous social network website with his friends in Harvard University. He was born on May 14, 1984. His father, Edward, is a dentist and his mother, Karen, is a psychiatrist. He and his three sisters were brought up (büyüme) in New York.

In his junior years Mark won prizes in Maths, Astronomy and Physics and was also good at languages. He began using computer and writing software when he was in the middle school. Later he enjoyed developing computer programmes, especially communication the tools and games. He created his own programme, called Zucnet, so that his father could use the computer between the house and his dental surgery (dis cerrahisi).

At University, Mark studied Psychology and Computer Science. A short time later, he created a programme just for fun. It was called Facemash and it let students in Harvard University select the best-looking person from a choice of photos. The program included the names and photos of students in Harvard.

Now Mark is one of the richest young people in the world. In 2010 he was awarded the 'Man of The Year' award by *Time* magazine.

was awarded the <Man of the Year> award in _____

created _____

was good at _____

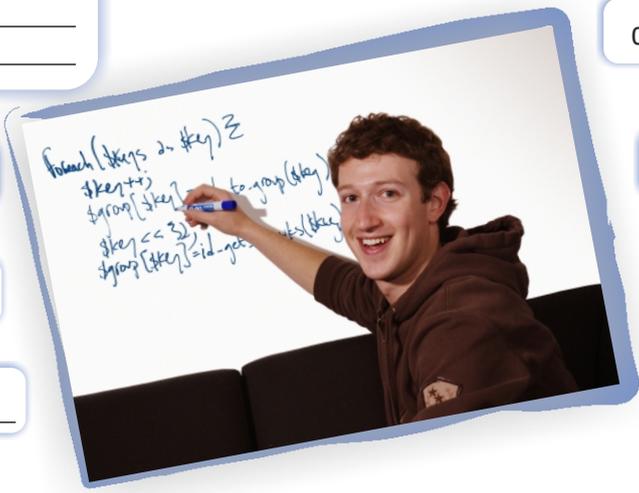
studied _____

job _____

nationality _____

was born in _____

created _____



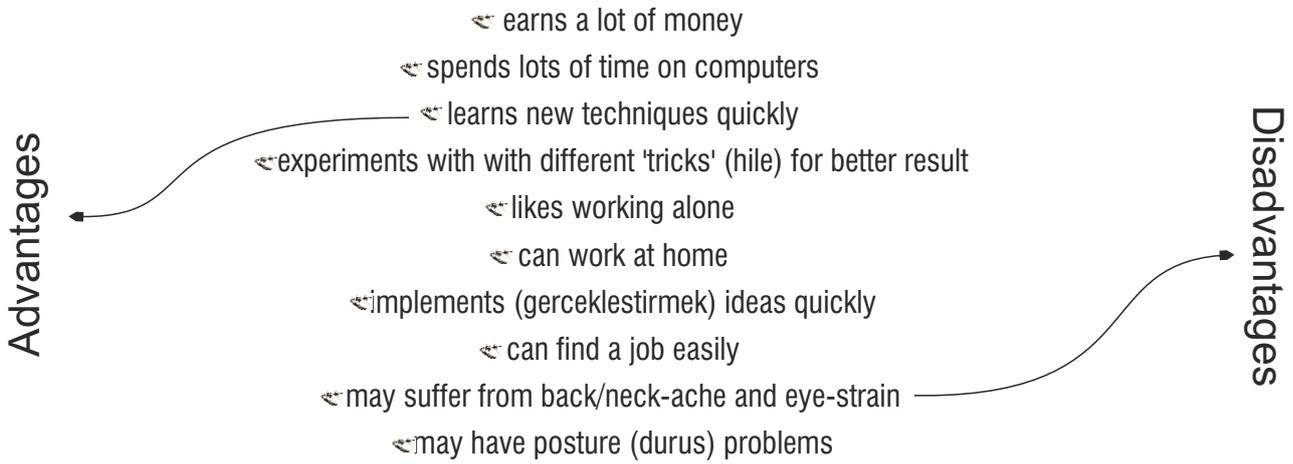
Activity 4

What kind of qualifications do you think a web-programmer should have? Write four suggestions in the spaces below.

1	2
3	4

Activity 5

Read the list of advantages and disadvantages of being a web-programmer. Then categorize them by using arrows. An example has been done for you.



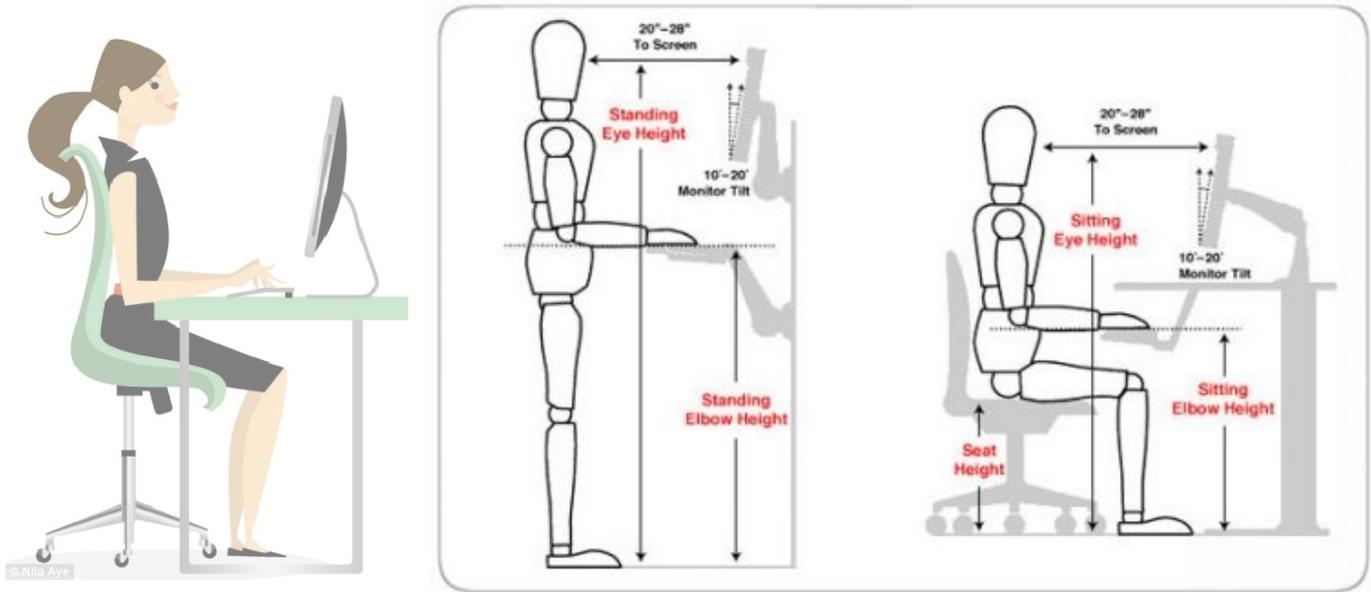
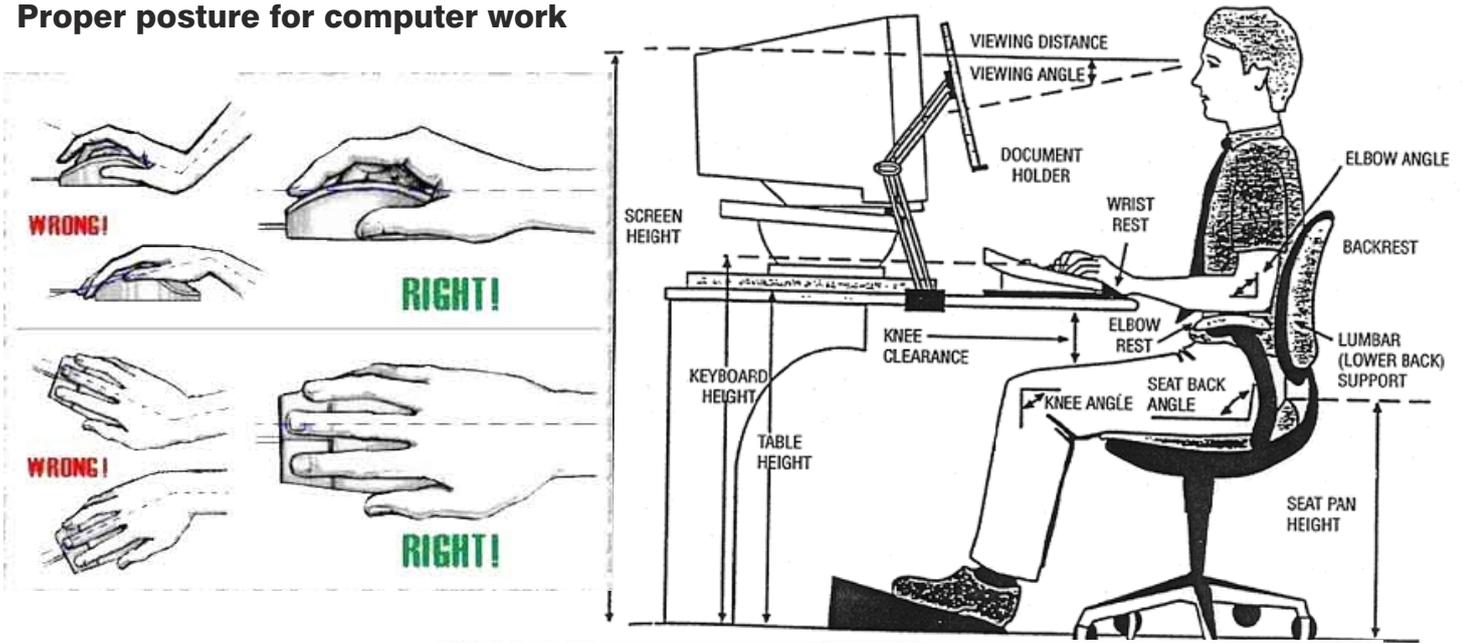
Activity 6

Look at the diagram below. Then draw a line from each label to the correct part of the body.



Now look at the pictures below with your partner. Compare the proper posture for computer use with your own posture while using the computer. You watch your partner and let your partner watch you. Tell him/her what s/he is doing wrong if the posture is bad. You can use some of the words from the body diagram above.

Proper posture for computer work



Activity 7

First read the four paragraphs (A-D) below. Then write the number of the correct heading (1-4) in the spaces above each section.

1

Use of movement

2

Posture and positioning

3

For your wrist

4

For your back

The first step to better posture at a desk is to adjust your chair to the right height for computer work. Next, arrange your computer so that your eyes are level with the screen.

A

When using the mouse, move your hand from the shoulder rather than the wrist. Use a reinforced wrist brace if you need one.

C

If you are prone (meyilli) to lower back pain, you may find that a firm cushion placed at the back gives you the support you need.

B

Remember to take regular breaks away from the computer and take a little exercise. Going straight from sitting in the break room is not a good idea. And when you get home, take time to stretch your limbs and relax!

D

Glossary

prone:
meyilli

break room:
mola odası

reinforced:
kuvvetlendirmek

adjust:
ayarlamak

cushion:
yastık



Activity 8

Read the sentences below. Then decide if they are good (G) or bad (B) advice.

- 1) At your computer, your feet should be flat on the floor.
- 2) To look after your eyes, sit close to the screen.
- 3) Don't keep your wrist flat on the desk.
- 4) Don't take regular breaks away from the computer.
- 5) You should adjust your chair to the correct height.
- 6) Find a cushion to support your back.

G	B
<input type="checkbox"/>	<input type="checkbox"/>



The Internet offers many positive benefits to young people educational and social. But unfortunately there are risks, too. Children and young people are vulnerable (incinebilir) and may expose themselves (kendilerini maruz bırakmak) to danger when using the Internet.



Activity 9

In pairs cut out the pictures from page 107. Then stick them in the right places below.



1) kidnap

2) threat

3) gambling



4) criminal

5) cyber-bullying

6) personal information

Activity 10

First look at the chart below. Then read the 5 short texts. Put a tick (✓) in the column which you think is related to the topic. There may be more than one tick for each one.

Cyber-bullying

Cyber-bullying (*sanal siddet*) includes sending hateful (*nefret dolu*) messages or even death threats to children, spreading (*yayılmak*) lies about them online, making nasty (*edepsiz*) comments on their social networking profiles, or creating a website to make fun of their looks or reputation.



Physical Danger

The threat of physical danger is probably the risk most reported by the media. Criminals can make use of the Internet and chatrooms and they can even progress to kidnapping.



Inappropriate Material

One of the main risk of using the Internet, e-mail or chatrooms is that young people may be exposed to inappropriate (*uygun olmayan*) material. This may be material that is pornographic, hateful (*nefret dolu*) or violent in nature; that encourages activities that are dangerous or illegal; that is just unsuitable for their age; or is biased (*tarafli*). One of the benefits of the Web is that it is open to all. Unfortunately, this also means that those with extreme views (*görüş*) can present them to the rest of the world.



Invasion of privacy

Camera phones, digital cameras and web-cams are everywhere these days. Children can be victims of their own inexperience (*tecrubesiz*) with new technology. Many children post pictures, videos or notes online and later regret (*pisman olmak*) it. Most parents do not allow their children to give personal information online and many children understand this.



Illegal behaviour/activity

Some young people may get involved in inappropriate, anti-social or illegal behaviour while using digital technologies. Young people may become involved in (*dahil olmak*) dangerous activities. Risks include buying and selling stolen goods. Easy online access (*erismek*) to gambling and hacking sites is also a big danger to young people.



<i>problem</i> <i>young people</i>	Cyber-bullying	Physical Danger	Inappropriate Material	Invasion of privacy	Illegal behaviour/activity
<i>death threats</i>					
<i>nasty comments on social network profiles</i>					
<i>can be victims of their own inexperience of new technology</i>					
<i>may give out their personal information</i>					
<i>may be exposed to unsuitable material</i>					
<i>can be encouraged to do activities that are dangerous or illegal</i>					
<i>could even be molested (<i>saldırıya uğramıs</i>) or kidnapped</i>					



Wheeling Circle

Form standing circles in your groups. Then take a pen or others object. Circulate it in turn in a clock-wise direction. The person who takes the pen object expresses his/her feelings and ideas about the good and bad aspects of the Internet. Then the next person takes it and does the same, and so on.



Self-assessment

A

In this unit,

- I liked _____
- I did not like _____
- I learnt how to _____
- I learnt the following new words/phrases _____

B

Make up sentences about the benefits and dangers of the Internet.

The Internet is useful because

The Internet is harmful because



C

Look at the questions below. Choose the correct answer to each one by circling a, b or c.

- 1) Programming actions help us to _____
 - a) avoid a mess
 - b) avoid instructions
 - c) save documents
- 2) In computing we use a set of instructions or directives called _____
 - a) an operating system
 - b) a computer system
 - c) programming languages
- 3) _____ was designed for business, finance and administration.
 - a) BASIC
 - b) COBOL
 - c) JAVA
- 4) Mark Zuckerberg created a programme called _____ so that his father could use the computer between the house and his dental surgery.
 - a) Microsoft Messenger
 - b) ICQ
 - c) Zucnet
- 5) _____ includes sending hateful messages or even death threats to children.
 - a) physical danger
 - b) cyber-bullying
 - c) inappropriate material

D Look at the table below. Then find someone in your group who does these things/agrees with these opinions. Write his/her name in the spaces.

😊 This student...

😊 Name of student(s)

often programmes his/her study time

uses JAVA for his/her computer

is good at Mathematics

wants to be a programmer

likes spending lots of time on computers

cares about his/her right posture while using a computer

thinks the Internet offers positive benefits

has been tricked or threatened while using the Internet

