Lebanese University

University Institute of Technology

Second year - CCNE

LAB 1 - OOP

Exercise 1 :

Write a program that asks the user to give two words. Then it compares them and displays the following output :

```
Give the first word
hello
Give the second word
hi
hi > hello
Press any key to continue . . .
```

Remark : use the method CompareTo from the class System.String :

int compare = ch1.CompareTo(ch2) ;

compare = 1 if ch1 > ch2

compare = 0 if ch1 = ch2

compare = -1 if ch1 < ch2

Exercise 2 : game

The objective of the game is to roll up two dices and compute the summation of values obtained : if the summation is less than 6, the player loses 5 dollars.

if the summation is greater than 6, the player wins 5 dollars .

You have to write a program that simulate the game knowing that the player begins with an amount of 20 dollars and plays 5 times.

```
i:1=> [dice 1]=5 and [dice 2]=5
sum = 10; amount=25
i:2=> [dice 1]=2 and [dice 2]=5
sum = 7; amount=30
i:3=> [dice 1]=3 and [dice 2]=1
sum = 4; amount=25
i:4=> [dice 1]=5 and [dice 2]=5
sum = 10; amount=30
i:5=> [dice 1]=5 and [dice 2]=1
sum = 6; amount=30
the total amount is 30 dollars.
Press any key to continue . . .
```

Remark: You have to use the class Random which enable you to get a random value.

First step: create an object Random => Random objRandom = new Random();

Second step :

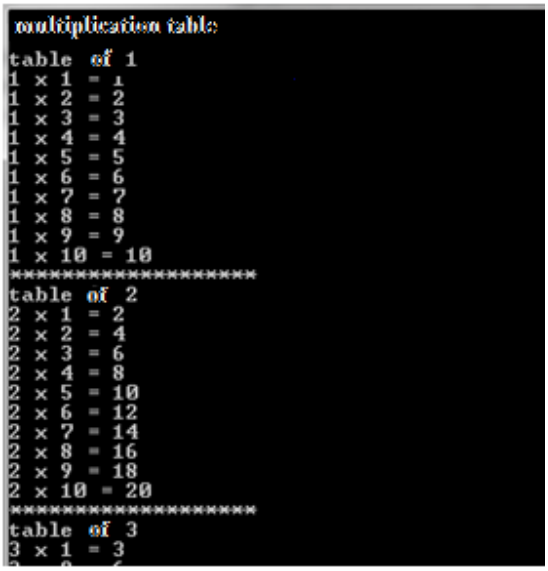
int r = objRandom.Next(); => return a random value.

int r = objRandom.Next(n); => return a random value between 0 and n.

int r = objRandom.Next(min,max); => return a random value between min and max.

Exercice 3 :

Write a program that displays the multiplication table as follow:



Exercice 4 :

Color	**Frequency (THz)**
Infrared	< 405
Red	~ 405-480
Orange	~ 480-510
Yellow	~ 510-530
Green	~ 530-580
Bluie	~ 580-690
Purple	~ 690-790
Ultraviolet	> 790

Ask the user to enter a THz frequency. Then according to the table above, the program should indicate the corresponding color. (Give two methods)