Homework-05

1. Write a program which displays the reverse of a string.
   Example:
   America ⟶ aciremA
   University ⟶ ytisrevinU
   Name ⟶ emaN
   Concept :
      - Iterate over the string from the last character to the first character.
      - Display each character

2. Write the program Which reads a sequence of integer from the user and stops by displaying "Done" when the sum of these values exceeds 100.
   Concept:
      - Declare a variable sum to store the sum
      - Read values from the user and add them to sum as long as **sum < = 100**
      - When sum > 100 display "Done".

3. Write a program using Max method to find the maximum number between two data type. (Don't be use String).

4. Write a program to output the first 200 items of this Sequence :0 1 1 0 1 -1 0 -1 -1 0 …………………. The first item of the sequence is 0, the second item is 1, and the odd term is the sum of the first two items and the even term is the difference between the first two items.

   Input
   There is no input.

   Output
   Must output the result 10 items in a line for 200 items there will be 20 lines

Output Sample
0 1 1 0 1 -1 0 -1 -1 0
-1 1 0 1 1 0 1 -1 0 -1
-1 0 -1 1 0 1 1 0 1 -1
………………………
……………………...

5. Do you know Nested Loops? A nested loop is a loop within a loop, an inner loop within the body of an outer one. How this works is that the first pass of the outer loop triggers the inner loop, which executes to completion. Then the second pass of the outer loop triggers the inner loop again. This repeats until the outer loop finishes. Of course, a break within either the inner or outer loop would interrupt this process.

❖ **Question**: Write a program that uses a nested for loop to display a multiplication table.

6. Overloading methods. write a methods methodOverLoading() where pass the declared value.

Declared value is

int a = take random integer with 6th digit (yyyyyy)

int b = take random integer with 6th digit (yyyyyy)

double c = take random double with 5th digit(y.yyyy)

double d = take random double with 5th digit(y.yyyy)

char ch = randomly take the Character.

String s = "anything you wish"

String t = "anything you wish"

You will make 5 methods

1. pass the int value a and sum all of the digit of the integer a .

2. pass a,b,c and return the sum of a,b,c

3. pass a,b,c,d and make sum two passed integer and make differences two double value.

4. Pass two int two double value and the ch value sum all value (ch's asci value).

5. Pass all declared value and print the sum of all int and double value. print the character print the String.

- There is no user input. There is just random number and declared character, String

Declared value	Output Samples

a = 785446 (randomly taken)
b = 679343(randomly taken)
c = 1.1505(randomly taken)
d = 3.7034(randomly taken)
ch = q (randomly taken)
s = America
t = Canada
	For the first method: 34
	For the second method:1464790.150
	For the third method:
	    Sum of integer is: 785446679343
	    Difference of double value is : -2.55
	For the fourth method: 117.8539
	For the fifth method:
	    Sum is : 1464793.8539
	    The char is : q
	The string AmericaCanada

** NOTICE**

- test your code by sample input.
- your code won't be same of others if it is then both of your assignment will be declined.
- use comment almost every line of code.
- submit it on time .
- your code will have in one project named Assignment_05_,make it zip and send it to akabillah4420@gmail.com don't forget to write the Student ID and subject name "Assignment_05" in the mail.
- Be sincere to obey all of the rules otherwise may be you will get (LOW SCORE.)

Deadline: **24 April 12:00 am BD time and 2:00 pm china time.**

__Happy Coding__