# c-sharp

# HW #1

In console application :

1- Write a C# program that computes $y = sin(2x) + 5cos(x)$. The program should obtain the value of $x$ from the user and prints the value of $y$.

   Hint :: **use math libraries .** (math.sin) – (math.cos)

2- Write a C# program that inputs two integers from the keyboard, and prints the sum, difference, product, and division to the screen .

   Hint :: use **DataType.Parse**

```
Please Enter Two Numbers:
5
3
The Sum is : 8
The Difference is : 2
The Product is :  15
The Division is:  1
Remainder is :  2
```

3- Write a C# program to find the maximum and minimum number among three integer values entered by the user from the keyboard.

4- Write a C# program that accepts a person age and prints to which age category he/ she belongs as described in the table below :

| Age Range | Category |
|---|---|
| 0-14 | Children |
| 15-24 | Youth |
| 25-64 | Adult |
| 65 and above | Senior |

Hint : **Use nested if else structure**

5- Write a program that accepts the number of the day of the week and displays the name of the corresponding day. Assume Day 1 is Saturday, Day 2 is Monday, and so on. For example if you have entered 1 as your day number, the program should display "The day is Saturday." as the output.

Hint : **(Use switch statement to solve the problem).**