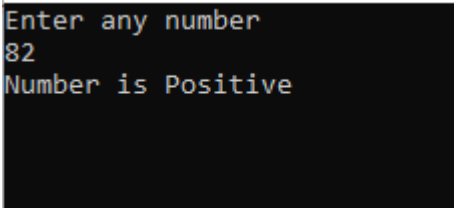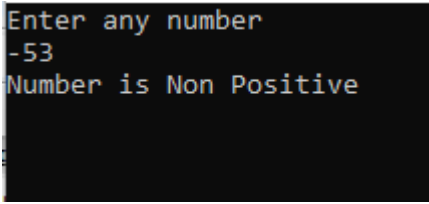# ASSIGNMENT 07
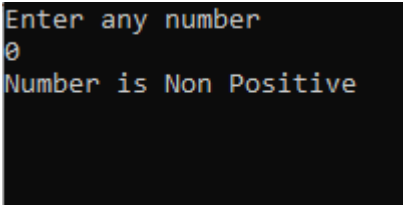
1.
```c
#include<stdio.h>
#include<conio.h>
int main()
{
    int num;
    printf("Enter any number\n");
    scanf("%d",&num);
    if(num>0)
        printf("Number is Positive");
    if(num<=0)
        printf("Number is Non Positive");
    getch();
}
```
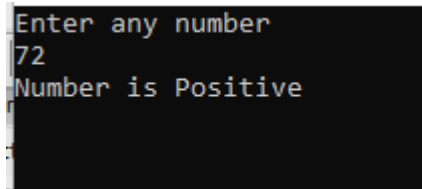
```
Enter any number
82
Number is Positive
```

```
Enter any number
-53
Number is Non Positive
```

```
Enter any number
0
Number is Non Positive
```

OR

```c
#include<stdio.h>
#include<conio.h>
int main()
{
    int num;
    printf("Enter any number\n");
    scanf("%d",&num);
    if(num>0)
        printf("Number is Positive");
    else
        printf("Number is Non Positive");
    getch();
}
```

```
Enter any number
72
Number is Positive
```

```
Enter any number
-31
Number is Non Positive
```
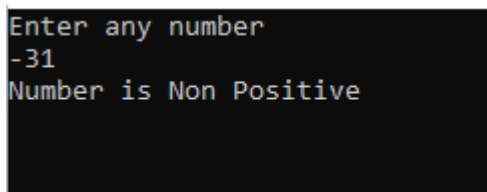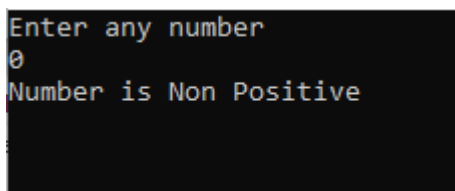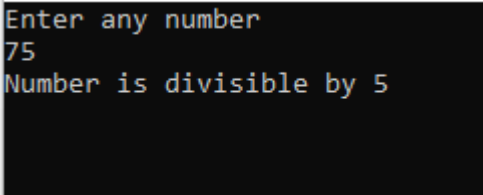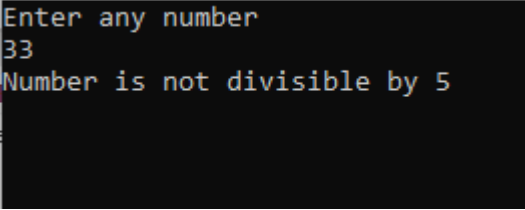
```
Enter any number
0
Number is Non Positive
```

2.
```c
#include<stdio.h>
#include<conio.h>
int main()
{
    int num;
    printf("Enter any number\n");
    scanf("%d",&num);
    if(num%5==0)
        printf("Number is divisible by 5");
    else
        printf("Number is not divisible by 5");
    getch();
}
```
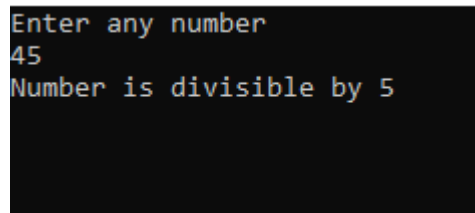
```
Enter any number
75
Number is divisible by 5
```

```
Enter any number
33
Number is not divisible by 5
```

<center>OR</center>

```c
#include<stdio.h>
#include<conio.h>
int main()
{
    int num;
    printf("Enter any number\n");
    scanf("%d",&num);
    if(num%5)
        printf("Number is not divisible by 5");
    else
        printf("Number is divisible by 5");
    getch();
}
```

```
Enter any number
45
Number is divisible by 5
```
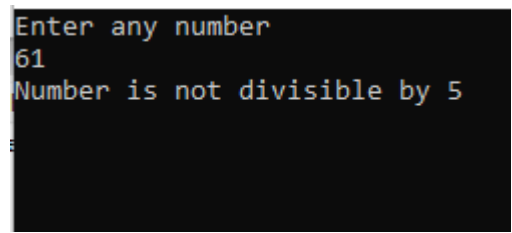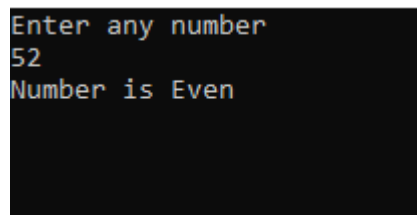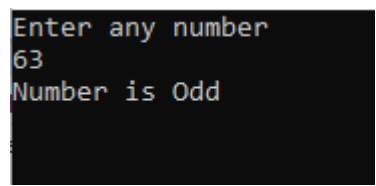
```
Enter any number
61
Number is not divisible by 5
```

3.
```c
#include<stdio.h>
#include<conio.h>
int main()
{
    int num;
    printf("Enter any number\n");
    scanf("%d",&num);
    if(num%2==0)
        printf("Number is Even");
    else
        printf("Number is Odd");
    getch();
}
```

```
Enter any number
52
Number is Even
```

```
Enter any number
63
Number is Odd
```

```c
#include<stdio.h>
#include<conio.h>
int main()
{
    int num;
    printf("Enter any number\n");
    scanf("%d",&num);
    if(num%2)
        printf("Number is Odd");
    else
        printf("Number is Even");
    getch();
}
```

```
Enter any number
24
Number is Even
```

```
Enter any number
81
Number is Odd
```

4.
```c
#include<stdio.h>
#include<conio.h>
int main()
{
    int num;
    printf("Enter any Number\n");
    scanf("%d",&num);
    if(num&1)
        printf("Number is Odd");
    else
        printf("Number is Even");
    getch();
}
```
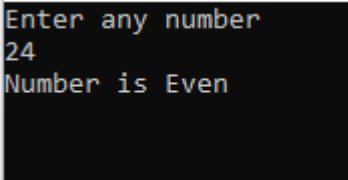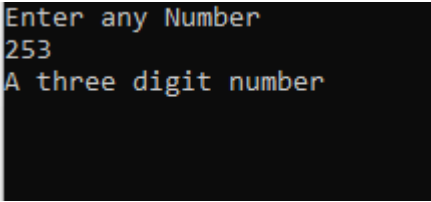
```
Enter any Number
86
Number is Even
```
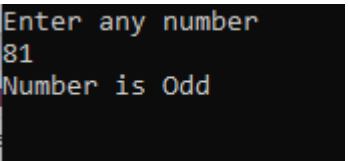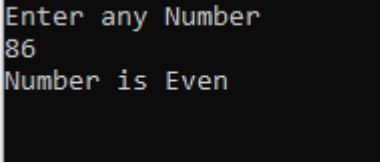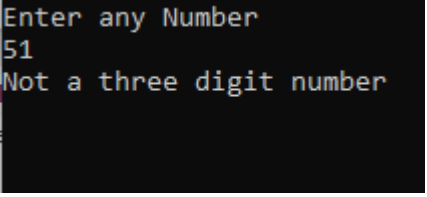
```
Enter any Number
117
Number is Odd
```
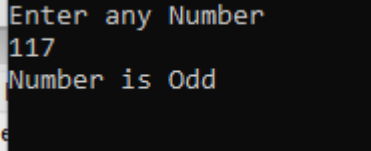
5.
```c
#include<stdio.h>
#include<conio.h>
int main()
{
    int num;
    printf("Enter any Number\n");
    scanf("%d",&num);
    if(num>=100 && num<=999)
        printf("A three digit number");
    else
        printf("Not a three digit number");
    getch();
}
```
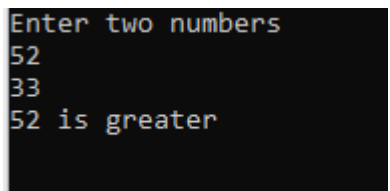
```
Enter any Number
253
A three digit number
```
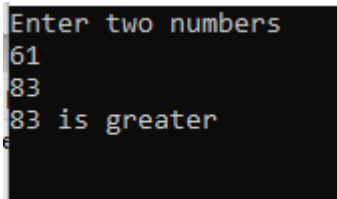
```
Enter any Number
51
Not a three digit number
```
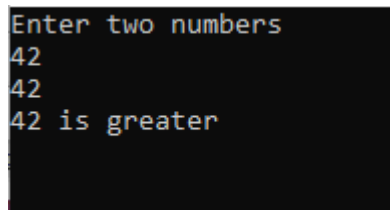
6.
```c
#include<stdio.h>
#include<conio.h>
int main()
{
    int num1,num2;
    printf("Enter two numbers\n");
    scanf("%d %d",&num1,&num2);
    if(num1>num2)
        printf("%d is greater",num1);
    else if(num2>num1)
        printf("%d is greater",num2);
    else
        printf("%d is greater",num1);
    getch();
}
```

```
Enter two numbers
52
33
52 is greater
```

```
Enter two numbers
61
83
83 is greater
```

```
Enter two numbers
42
42
42 is greater
```

7.
```c
#include<stdio.h>
#include<conio.h>
int main()
{
    float CP,SP,profit,loss,profit_percent,loss_percent;
    printf("Enter the Cost Price and Selling Price of the Product\n");
    scanf("%f %f",&CP,&SP);
    profit=SP-CP;
    loss=CP-SP;
    profit_percent=(profit/CP)*100;
    loss_percent=(loss/CP)*100;
    if(SP>CP)
    {
        printf("Profit = %f",profit);
        printf("\nProfit Percentage = %f",profit_percent);
    }
    else
    {
        printf("Loss = %f",loss);
        printf("\nLoss Percentage = %f",loss_percent);
    }
    getch();
}
```

```
Enter the Cost Price and Selling Price of the Product
37
54
Profit = 17.000000
Profit Percentage = 45.945946
```
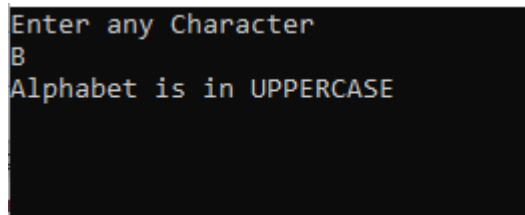
```
Enter the Cost Price and Selling Price of the Product
62
39
Loss = 23.000000
Loss Percentage = 37.096775
```

8.
```
#include<stdio.h>
#include<conio.h>
int main()
{
    int mark1,mark2,mark3,mark4,mark5;
    printf("Enter the marks of five subjects\n");
    scanf("%d %d %d %d
%d",&mark1,&mark2,&mark3,&mark4,&mark5);
    if(mark1>=33 && mark2>=33 && mark3>=33 &&
mark4>=33 && mark5>=33)
        printf("Canditate has Passed the Examination");
    else
        printf("Canditate has Failed the Examination");
    getch();
}
```
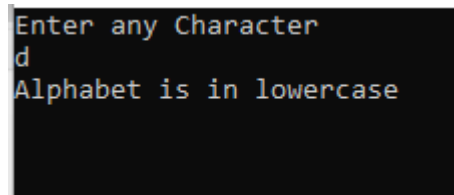
```
Enter the marks of five subjects
62
71
87
91
83
Canditate has Passed the Examination
```

```
Enter the marks of five subjects
31
23
45
67
89
Canditate has Failed the Examination
```
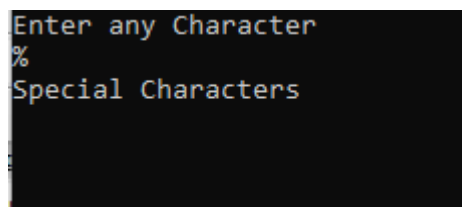
9.
```c
#include<stdio.h>
#include<conio.h>
int main()
{
    char ch;
    printf("Enter any Character\n");
    scanf("%c",&ch);
    if(ch>='A' && ch<='Z')
        printf("Alphabet is in UPPERCASE");
    else if(ch>='a' && ch<='z')
        printf("Alphabet is in lowercase");
    else
        printf("Special Characters");
    getch();
}
```

```
Enter any Character
B
Alphabet is in UPPERCASE
```

```
Enter any Character
d
Alphabet is in lowercase
```

```
Enter any Character
%
Special Characters
```

```c
10.     #include<stdio.h>
        #include<conio.h>
int main()
{
  int age,amount,year;
  float rate=0.05,maturity;
  printf("Enter the age of the Client\n");
  scanf("%d",&age);

  if(age>=18 && age<25)
  {
    year=30;
    printf("Enter the amount of Investment\n");
    scanf("%d",&amount);

    if(amount>=10000 && amount<=100000)
    {
      printf("\nThe Policy Period is 30 Years\n");
      maturity=amount*(1+rate*year);
      printf("Maturity Amount = %f",maturity);
    }
    else
    printf("The Minimum Amount of Investment Should be
10000");
  }
  else if(age>=25 && age<40)
  {
    year=20;
    printf("Enter the amount of Investment\n");
    scanf("%d",&amount);

    if(amount>=10000 && amount<=100000)
    {
      printf("\nThe Policy Period is 20 Years\n");
      maturity=amount*(1+rate*year);
```

```c
        printf("Maturity Amount = %f",maturity);
      }
      else
      printf("The Minimum Amount of Investment Should be
10000");

  }
  else if(age>=40 && age <=55)
  {
     year=10;
     printf("Enter the amount of Investment\n");
     scanf("%d",&amount);

     if(amount>=10000 && amount<=100000)
     {
        printf("\nThe Policy Period is 10 Years\n");
        maturity=amount*(1+rate*year);
        printf("Maturity Amount = %f",maturity);
     }
     else
     printf("The Minimum Amount of Investment Should be
10000");
  }
  else
     printf("The Policy is not applicable for given age group");

  getch();
}
```

```
Enter the age of the Client
24
Enter the amount of Investment
41000

The Policy Period is 30 Years
Maturity Amount = 102500.000000
```

```
Enter the age of the Client
15
The Policy is not applicable for given age group
```

```
Enter the age of the Client
31
Enter the amount of Investment
8000
The Minimum Amount of Investment Should be 10000
```