Logic Building Assignment : 6

1. Write a program which accept number from user and if number is less than 50 then print small, if it is greater than 50 and less than 100 then print medium, if it is greater than 100 then print large.

```
#include <stdio.h>
  void Number (int iNo)
  {
        if (iNo <= 50)
        {
              printf ("small");
        }
       else if (iNo > 50 && iNo <= 100)
       {
             printf ("Medium");
       }
       else if (iNo > 100)
       {
             printf ("Large");
       }
}
  int main ()
{
    int iValue = 0;
```

```
    printf ("Enter a number : \n");
    scanf ("%d", &iValue);

    Number (iValue);
      return 0;
}
```

Time Complexity

2. Accept single digit number from user and print it into word.

```
#include <stdio.h>
  void Display (int iNo)
{
      if (iNo < 0)
      {
          iNo = -iNo;
      }
      if (iNo == 1)
    {
        printf ("one");
    }
    else if (iNo == 2)
    {
        printf ("Two");
    }
    else if (iNo == 3)
    {
        printf ("Three");
    }
```

```
    else if (iNo == 4)
    {
        printf ("Four");
    }
    else if (iNo == 5)
    {
        printf ("Five");
    }
    else if (iNo == 6)
    {
        printf ("Six");
    }
    else if (iNo == 7)
    {
        printf ("seven");
    }
    else if (iNo == 8)
    {
        printf ("Eight");
    }
    else if (iNo == 9)
    {
        printf ("Nine");
    }
    else
    {
        printf ("Invalid Number");
    }
}
```

```
int main()
{
    int iValue = 0;
    printf("Enter a number : \n");
    scanf("%d", &iValue);

    Display(iValue);

    return 0;
}
```

3. Write a program to find Factorial of given number.

```
#include <stdio.h>
int Factorial(int iNo)
{
    int iCnt = 0;
    int iFact = 1;
    if(iNo < 0)
    {
        iNo = -iNo;
    }
    for(iCnt = iNo; iCnt >= 1; iCnt--)
    {
        iFact = iFact * iCnt;
    }
    return iFact;
}
```

```
int main()
{
    int iValue = 0 , iRet = 0;

    printf ("Enter a number : \n");
    scanf ("%d", &iValue);

     iRet = Factorial (iValue);
    printf ("Factorial of number is %d",
            iRet);
    return 0;
}
```

Time complexity O(N)

4. Write a program which accept number from user and display its table.

```
#include <stdio.h>
  void Table (int iNo)
{
      int iCnt = 0;
       if (iNo < 0)
       {
           iNo = - iNo;
       }
   for (iCnt = 1; iCnt <= 10; iCnt++)
   {
       printf ("%d\t", iCnt * iNo);
   }
}
```

```
int main()
{
    int iValue = 0;
    printf("Enter a number : \n");
    scanf("%d", &iValue);
    Table(iValue);
    return 0;
}
```

Time complexity - O(N)

5. Write a program which accept number from user and display its table in reverse order.

```
#include <stdio.h>
void TableRev(int iNo)
{
    int iCnt = 0;
    if (iNo < 0)
    {
        iNO = -iNO;
    }
    for (iCnt = 10; iCnt >= 1; iCnt--)
    {
        printf("%d\t", iCnt * iNO);
    }
}
```

```
int main()
{
    int iValue = 0;

    printf("Enter a number : \n");
    scanf("%d", &iValue);

    TableRev(iValue);
    return 0;
}
```

Time complexity O(N)