

Assignment No :- 7

(Q1) Write a program which accept number from user and if number is less than 50 then print small, if it greater than 50 and less than 100 then print medium, if it is greater than 100 then print large.

input = 75

output = medium

```
#include <stdio.h>
void display (int iNo)
{
    if (iNo <= 50)
        { printf ("Small \n"); }
    else if (iNo > 50 & iNo <= 100)
        { printf ("Medium \n"); }
    else
        { printf ("Large \n"); }
}
int main()
{
    int iValue = 0;
    printf ("Enter number \n");
    scanf ("%d", &iValue);
    display (iValue);
    return 0;
}
```

Time complexity - O(1)

Q2) Accept single digit from user and print it into word.

input - 9

output - Nine.

```
#include <stdio.h>
```

```
Void display(int info)
```

```
{ switch(info)
```

```
    { case 0: printf("zero\n"); break;
```

```
    case 1: printf ("one\n"); break;
```

```
    case 2: printf ("two\n"); break;
```

```
    case 3: printf ("three\n"); break;
```

```
    case 4: printf ("four\n"); break;
```

```
    case 5: printf ("five\n"); break;
```

```
    case 6: printf ("six\n"); break;
```

```
    case 7: printf ("seven\n"); break;
```

```
    case 8: printf ("Eight\n"); break;
```

```
    case 9: printf ("Nine\n"); break;
```

```
    default : printf ("Invalid Input\n");
```

```
}
```

```
}
```

```
int main()
```

```
{ int iValue = 0
```

```
    printf ("Enter number:\n");
```

```
    scanf ("%d", &iValue);
```

```
    display (iValue);
```

```
    return 0;
```

```
}
```

Time Complexity - O(1)

(Q) Date _____
Page _____

(Q3) Write a program to find factorial of given number.

input - 5

Output - 120

```
#include <stdio.h>
```

```
int Factorial (int iNo)
```

```
{ int fact = 1;
```

```
    for (int i = 1, i <= iNo, i++)
```

```
    { fact = fact * i;
```

```
}
```

```
    return fact;
```

```
}
```

```
int main()
```

```
{ int iValue = 0, iRet = 0;
```

```
    printf("Enter number\n");
```

```
    scanf("%d", &iValue);
```

```
    iRet = Factorial (iValue);
```

```
    printf ("Factorial is: %d\n", iRet);
```

```
    return 0;
```

```
}
```

Time Complexity - $O(n)$

34) Write a program to accept a number from user and display its table.

```
#include <stdio.h>
int printTable (int ino)
{
    for (int i=1; i<=10; i++)
    {
        printf ("%d", ino*i);
    }
}

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

Time Complexity - $O(n)$

5) write a program to accept a number, from user and display its table in reverse order.

```
#include <stdio.h>
int printTable (int ino)
{
    for (int i=10; i>=1; i--)
    {
        printf ("%d", ino*i);
    }
}
```

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

3
pointTable(iValue),
return 0;

Time Complexity - fixed 10 loop in reverse $O(1)$