PRACTICAL – 3

a) Write a program using while loop to reverse the digits of a number.

```
#include <stdio.h>
int main( )
{
    int num, sum , rem;
    sum=0;
    /* Initialize and read in a value for num */
printf("Enter an integer :\n ");
scanf("%d", &num);
/*Calculating reverse number*/
while(num != 0)
{
rem = num%10;
sum = sum*10 + rem;
num /= 10;
    }
    printf("Reversed Number = %d",sum);
    return 0;
}
```

OUTPUT :

```
Enter an integer :
2711
Reversed Number = 1127
```

b) Write a program to calculate the factorial of a given number.

```
#include <stdio.h>
int main( )
{
int num, fact, i;
fact=1;
/* Initialize and read in a value for num */
```

```
printf("\nEnter any number =");
scanf("%d",&num);
/*Calculating factorial*/
for (i = 1; i <= num; i++)
{
    fact = fact * i;
}
printf("Factorial of %d = %d\n", num, fact);
return 0;
}
```

OUTPUT :

```
Enter any number =4
Factorial of 4 = 24
```

c) Write a program to print the Fibonacci series.

```
#include<stdio.h>
int main( )
{
    int i,a,b,c,num;
    a=0;
    b=1;
    /* Initialize and read in a value for num */
    printf("\n Enter number = ");
    scanf("%d",&num);
    printf("\n Fibonacci series up to %d term \n ",num);
    /* By default Fibonacci series starting values 0 and 1*/
    printf("%d\t%d",a,b);
    /*Remaining Fibonacci series values calculating */
    for(i=3;i<=num;i++)
    {
    c=a+b;
    printf("\t%d",c);
```

```
        a=b;
        b=c;
        }
        return 0;
    }
```

OUTPUT :

Enter number = 5

Fibonacci series up to 5 term

0 1 1 2 3