EXPERIMENT NO. 6
BASH/ C Shell Programming in UNIX

OBJECTIVE:

a. Write a bash / C program to print Fibonacci Series

CODE:

```
#include<stdio.h>
int main(void)
{
    int n,i,fib,f=0,s=1;
    printf("\nenter no. of terms");
    scanf("%d",&n);
    printf("\n%d",f);
    fib=f+s;
    printf("\n%d",fib);
    for(i=0;i<n;i++)
    {
        f=s;
        s=fib;
        fib=f+s;
        printf("\n%d",fib);
    }
}
```

OUTPUT:

```
ict23@ict23-ThinkCentre-M71e:~/Desktop$ gcc fib.c -o fib
ict23@ict23-ThinkCentre-M71e:~/Desktop$ ./fib
Enter the no.12
Fibonacci series of first 12 numbers:  1  1  2  3  5  8  13  21  34  55  89  144
```

OBJECTIVE:

b. Write a bash / C program to check whether the number is prime.

CODE:

```
#include<stdio.h>
#include<stdlib.h>
int main(void)
{
    int n,i;
    printf("\nenter a no.");
    scanf("%d",&n);
    for(i=2;i< n-1;i++)
    {
        if(n%i == 0)
        {
            printf("not prime");
            exit(0);
        }

    }
    if(i == n-1)
    {
        printf("prime");
    }
}
```

OUTPUT:

```
ict23@ict23-ThinkCentre-M71e:~/Desktop$ gcc prime.c -o prime
ict23@ict23-ThinkCentre-M71e:~/Desktop$ ./prime
enter a no:
7
the no. is prime
ict23@ict23-ThinkCentre-M71e:~/Desktop$ ./prime
enter a no:
125
the no. is not prime
```