Practical No. 8

Aim : Write and execute two programs using functions based on parameters passing by reference.

Theory :

A reference parameter "refers" to the original data in the calling function. Thus, any changes made to the parameter are also made to the original variable.

Code :

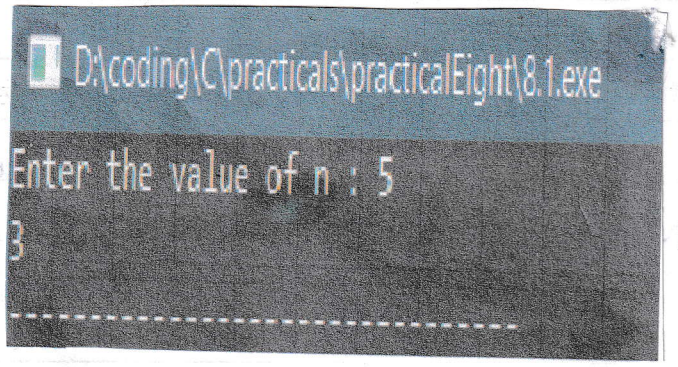
~~→ To find the factorial of a number using prototype :-~~

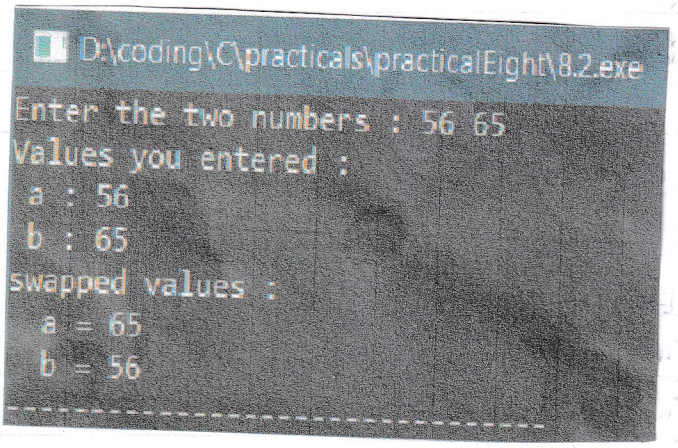
~~→ #include <stdio.h>~~

1> To print the 'n^th' Fibonacci series.

→

```
#include <stdio.h>
int fib(int n);
int main() {
    int n;
    printf("Enter the value of n : ");
    scanf("%d", &n);
    printf("%d", fib(n-1));
}
int fib(int n) {
    if (n<=1) {
        return n;
    }
    else
    {
        return fib(n-1) + fib(n-2);
    }
}
```


D:\coding\C\practicals\practicalEight\8.1.exe
Enter the value of n : 5
3


D:\coding\C\practicals\practicalEight\8.2.exe
Enter the two numbers : 56 65
Values you entered :
a : 56
b : 65
swapped values :
a = 65
b = 56

2) To swap the value of two variables using call by reference.

→
```
#include<stdio.h>
    int swap (int *x, int *y);
    int a,b;
    int main () {
        printf("Enter the two numbers : ");
        scanf("%d %d", &a, &b);
        printf(" values you entered : \n a : %d \n b : %d \n", a, b
        swap (&a, &b);
        printf("Swapped values : \n a = %d \n b = %d ", a, b);
    }
int swap (int *x, int *y) {
    int temp;
    temp = *x ;
    *x = *y ;
    *y = temp;
}
```

Conclusion :

Hence, I wrote and executed two programs using functions based on parameters passing by reference.