```
/*Write a program in C using recursion to display the factorial of a number
Name- Parimal Muley 588[E3]*/
#include<stdio.h>
unsigned long int multiplyNumbers(int n);
//using unsigned long int to store more value(as unsigned long int can store more range than long)
int main() {
   int n;
   printf("Enter a no of which you wish to find factorial: ");
   //asking the user to enter the no of which he wants the factorial
   scanf("%d",&n);
   //scanning the input by user
   printf("Factorial of %d is = %ld", n, multiplyNumbers(n));
   return 0;
}
// using if else statement to get the factorial and stopping it to 1
unsigned long int multiplyNumbers(int n) {
   if (n>=1)
      return n*multiplyNumbers(n-1);
   else
      return 1;
}
/* Output-
Enter a no of which you wish to find factorial: 15
Factorial of 15 is = 2004310016
--------------------------------
Process exited after 3.184 seconds with return value 0
Press any key to continue . . .*/
```

Part 2

```
/*Write a program in C using recursion to display fibonacci series within a given range
Name-Parimal Kiran Muley
Roll No- 588(E3)*/
#include<stdio.h>
int main()//main function
{
	int n,i;
	printf("Enter the range\n");
	scanf("%d",&n);//scanning the range
	printf("Fibonacci series is :\n");
	for(i=0;i<n;i++)//using for loop
	printf("%5d", fibo(i));//printing value from fibo(int i)
	return 0;
}
int fibo(int i)
{
	if(i==0)
	return 0;
	else if(i==1)
	return 1;
	else
	return((fibo(i-1)+fibo(i-2)));
}

/* OUTPUT-
Enter the range
```

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Fibonacci series is :

0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181

Process exited after 7.388 seconds with return value 0

Press any key to continue . . .

*/