120CS0196

PROGRAMMING LABORATORY-4

CS1000

Assignment-4

Group-P7 : Section:'E'

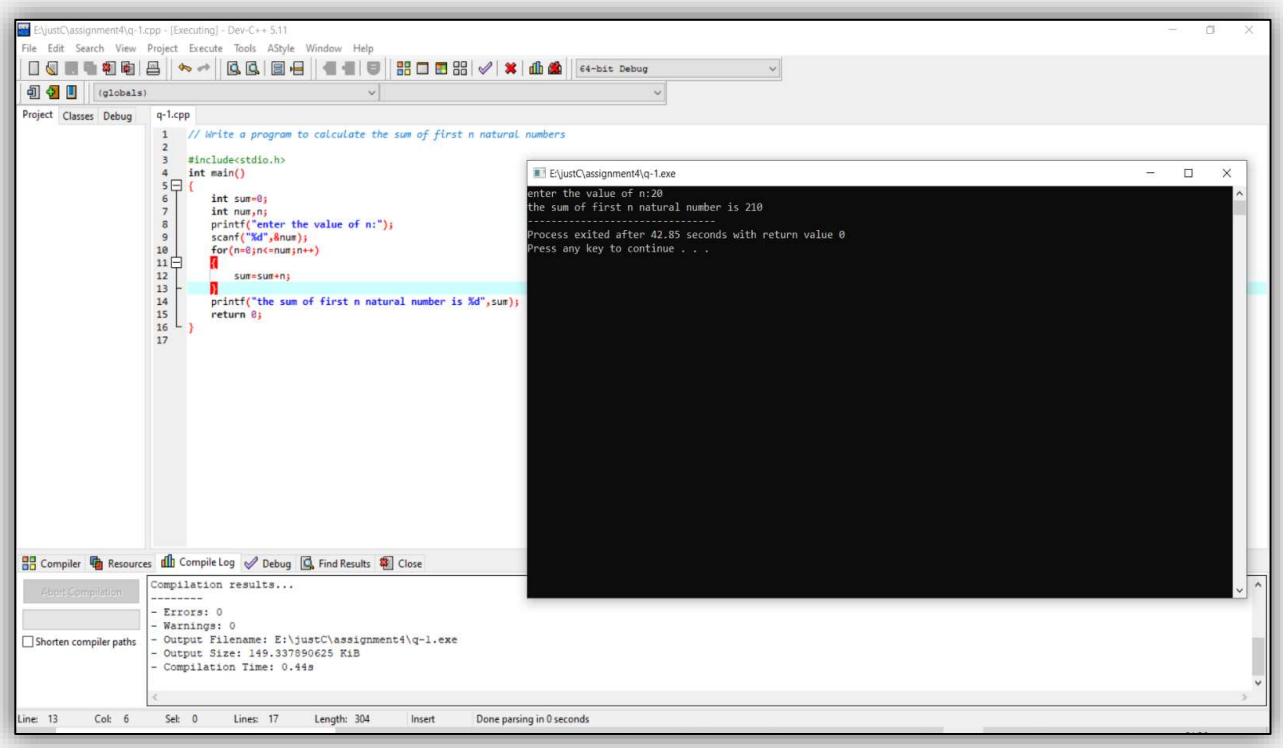
Prachi Nandi

120CS0196

Codes are uploaded on my GitHub account :
https://github.com/prachi237/justC

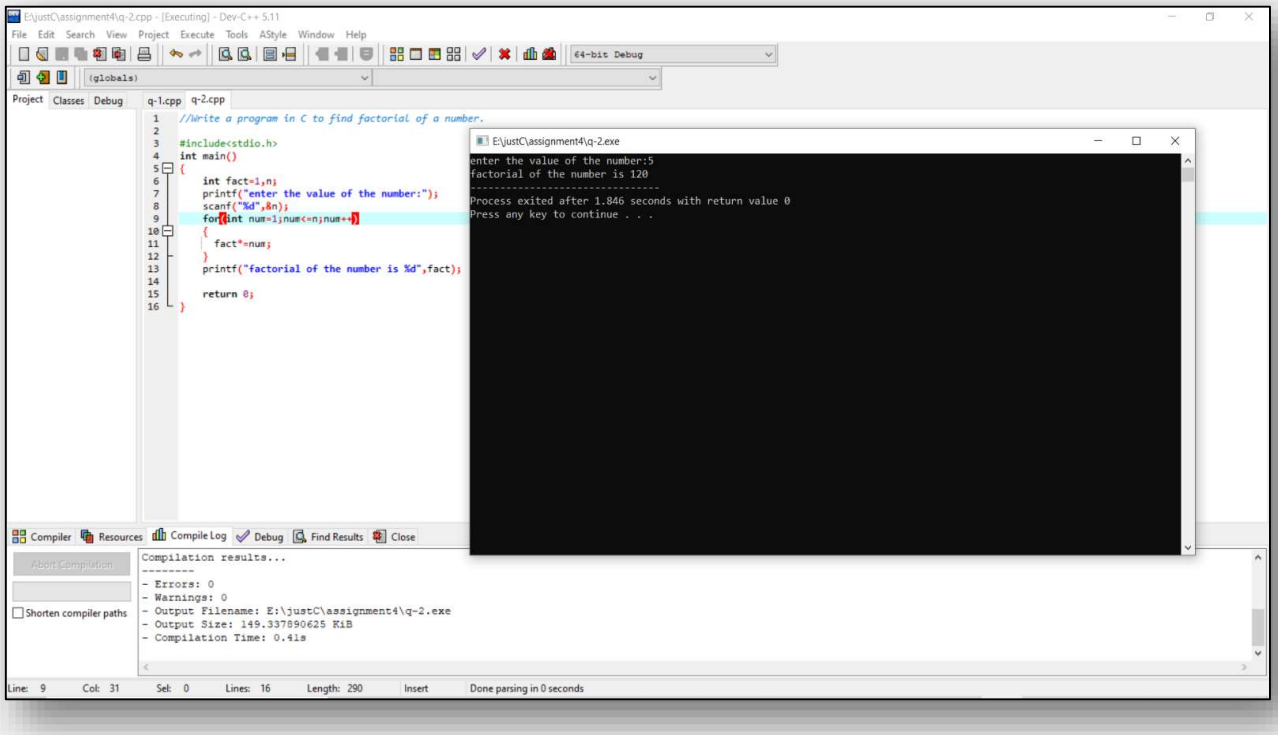
1.Write a program to calculate the sum of first n natural numbers.

```c
#include<stdio.h>
int main()
{
	int sum=0;
	int num,n;
	printf("enter the value of n:");
	scanf("%d",&num);
	for(n=0;n<=num;n++)
	{
		sum=sum+n;
	}
	printf("the sum of first n natural number is %d",sum);
	return 0;
}
```



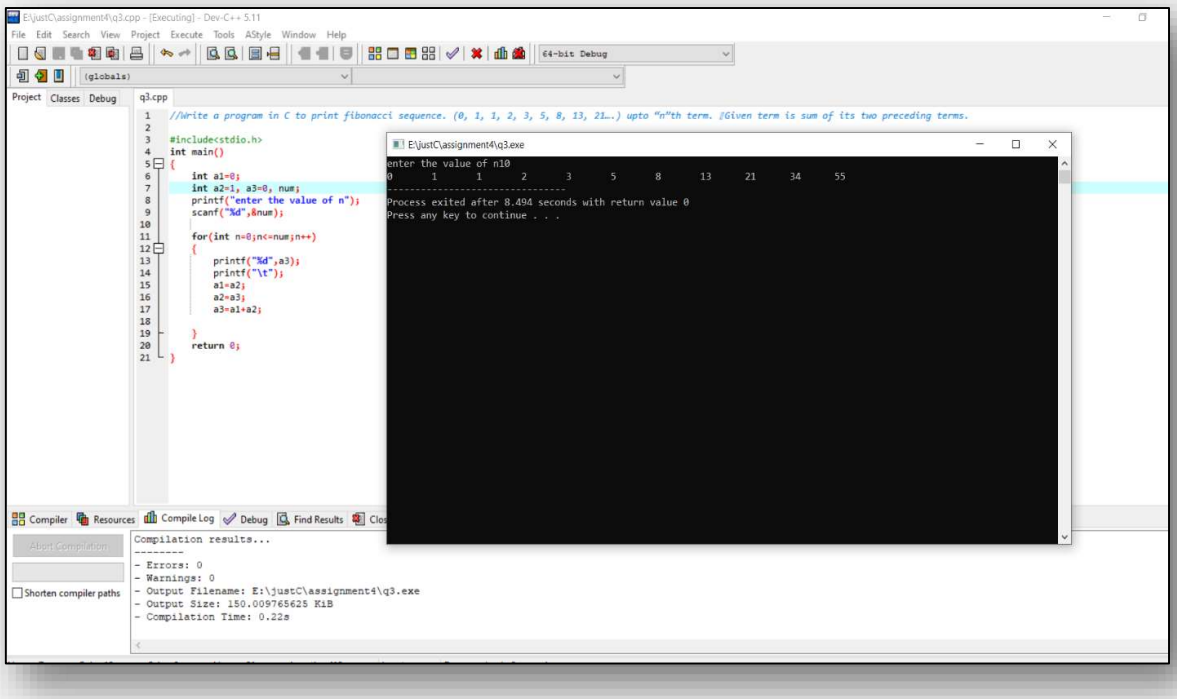
2.Write a program in C to find factorial of a number.

```c
#include<stdio.h>
int main()
{
        int fact=1,n;
        printf("enter the value of the number:");
        scanf("%d",&n);
        for(int num=1;num<=n;num++)
        {
          fact*=num;
        }
        printf("factorial of the number is %d",fact);

        return 0;
}
```



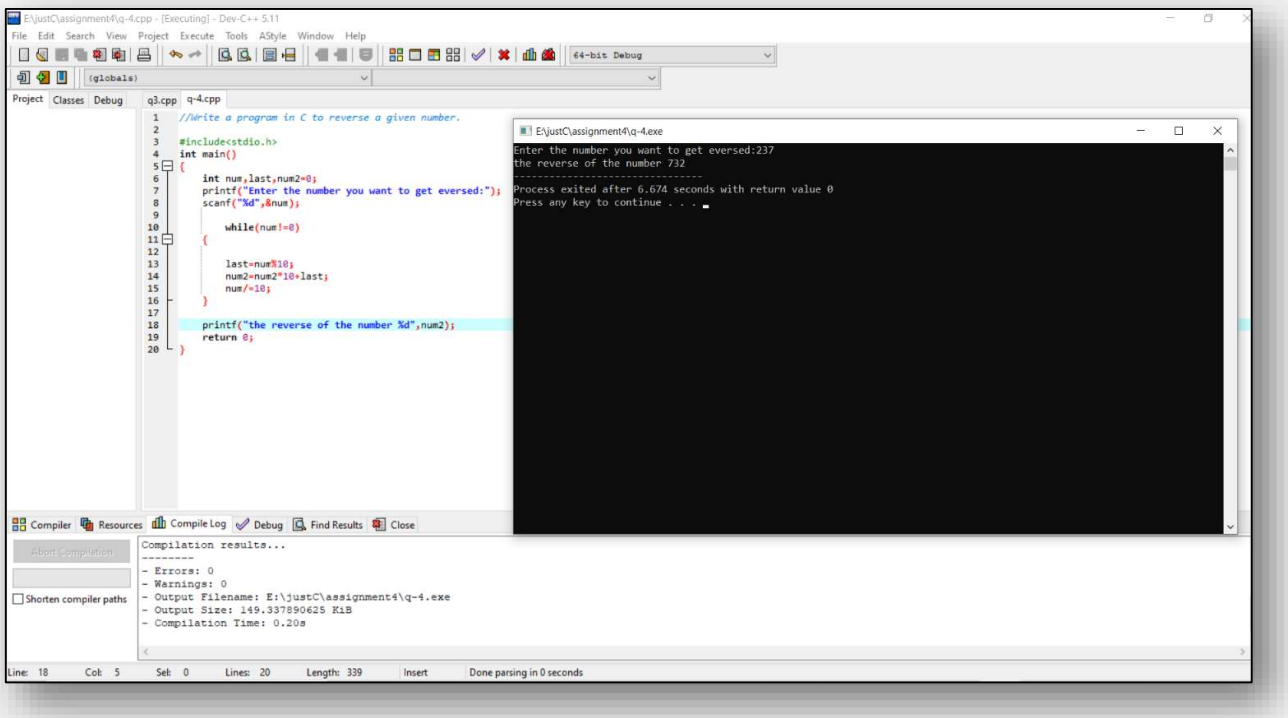
3. Write a program in C to print fibonacci sequence. (0, 1, 1, 2, 3, 5, 8, 13, 21….) upto "n"th term. Given term is sum of its two preceding terms.

```
#include<stdio.h>
int main()
{
        int a1=0;
        int a2=1, a3=0, num;
        printf("enter the value of n");
        scanf("%d",&num);

        for(int n=0;n<=num;n++)
        {
                printf("%d",a3);
                printf("\t");
                a1=a2;
                a2=a3;
                a3=a1+a2;
                }
        return 0;       }
```



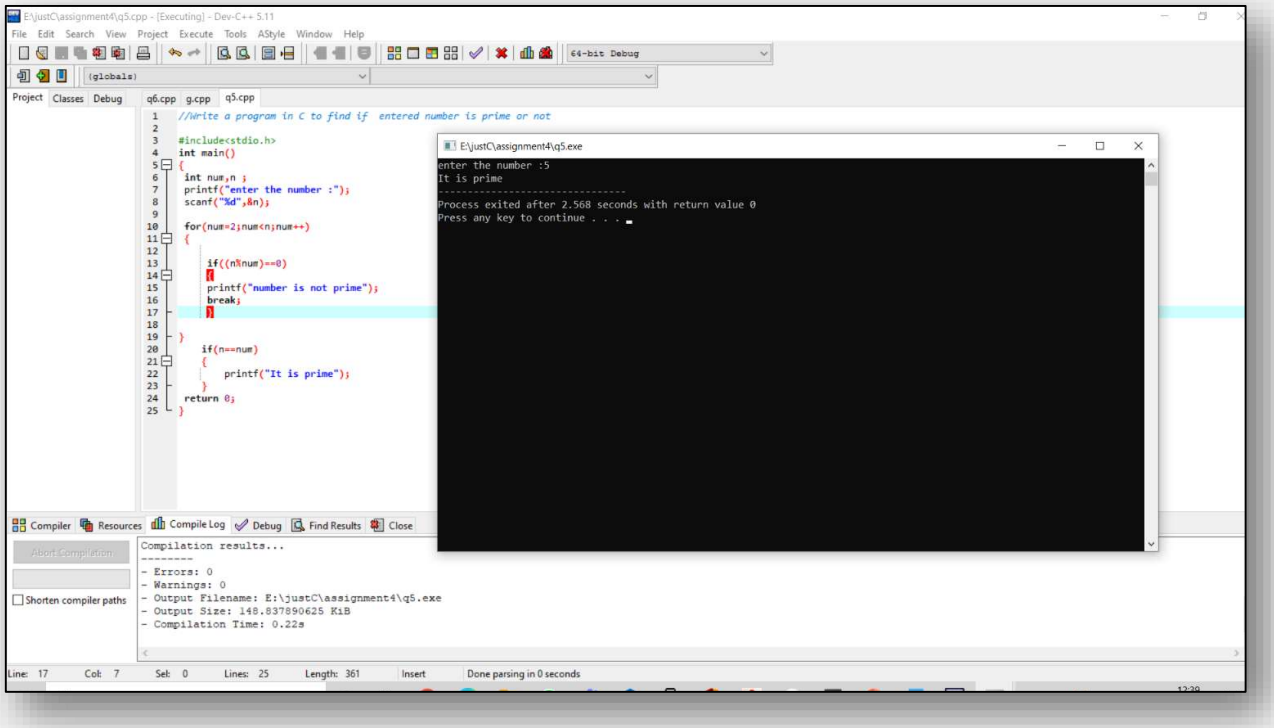
4. Write a program in C to reverse a given number.

```
#include<stdio.h>
int main()
{
        int num,last,num2=0;
        printf("Enter the number you want to get eversed:");
        scanf("%d",&num);
            while(num!=0)
              {
               last=num%10;
               num2=num2*10+last;
               num/=10;
               }
        printf("the reverse of the number %d",num2);
  return 0;
}
```



5. Write a program in C to find if entered number is prime or not.

```
#include<stdio.h>
int main()
{
 int num, n ;
 printf("enter the number :");
 scanf("%d",&n);
 for(num=2;num<n;num++)
   {
  if((n%num)==0)
        {  printf("number is not prime"); break;
         }
    }
   if(n==num)
   { printf("It is prime");
}
 return 0;
}
```



6. Write a program in C to display the pattern like right angle triangle with a number.

The pattern like : 1

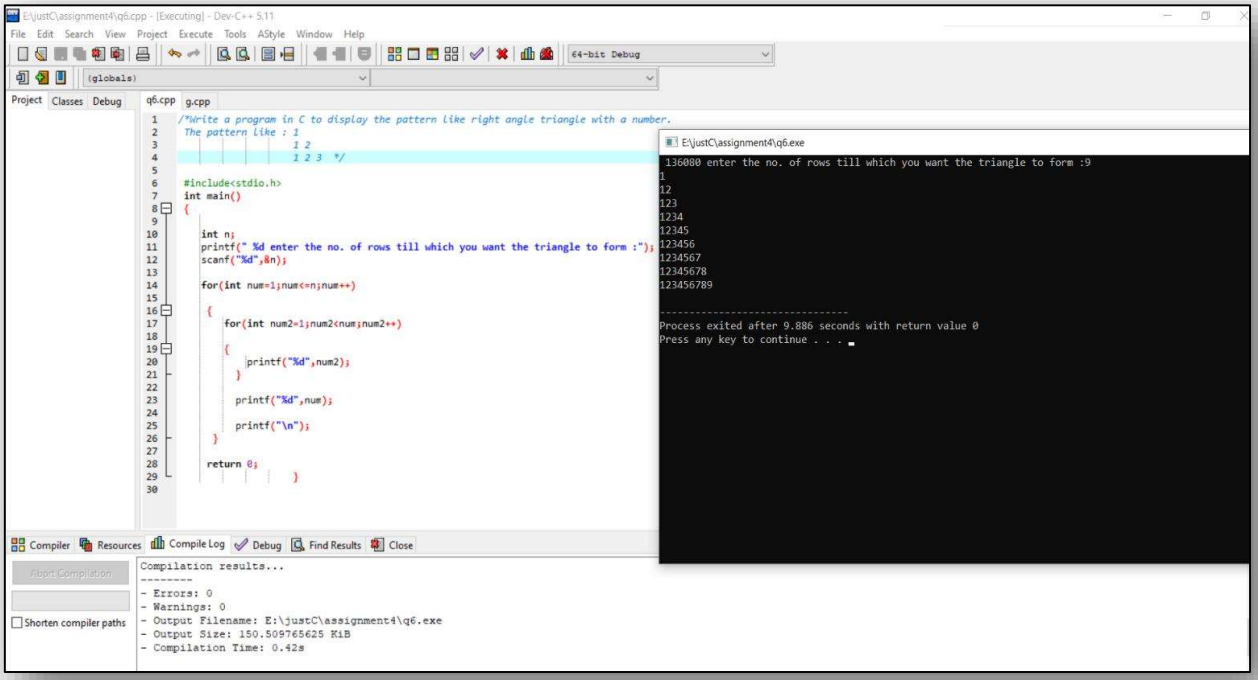
1 2

1 2 3

:

: ...n

```
#include<stdio.h>
int main()
{
        int n;
        printf(" %d enter the no. of rows till which you want the triangle to form :");
        scanf("%d",&n);
        for(int num=1;num<=n;num++)
        {
                for(int num2=1;num2<num;num2++)
                {
                        printf("%d",num2);
                }
                printf("%d",num);
                printf("\n");
        }
    return 0;
}
```



Codes are uploaded on my GitHub account :
https://github.com/prachi237/justC

Submitted by: Prachi Nandi 120CS0196

-Thank you-