

# *CSA5734-FUNDAMENTALS OF COMPUTING FOR DATABASE SYSTEM*

DATE:04-10-2022

NAME:B.VINEETHA

DAY-02

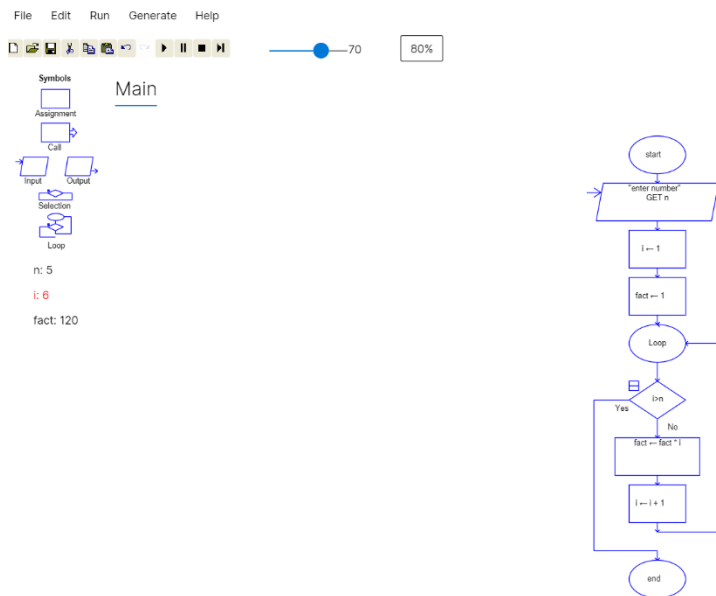
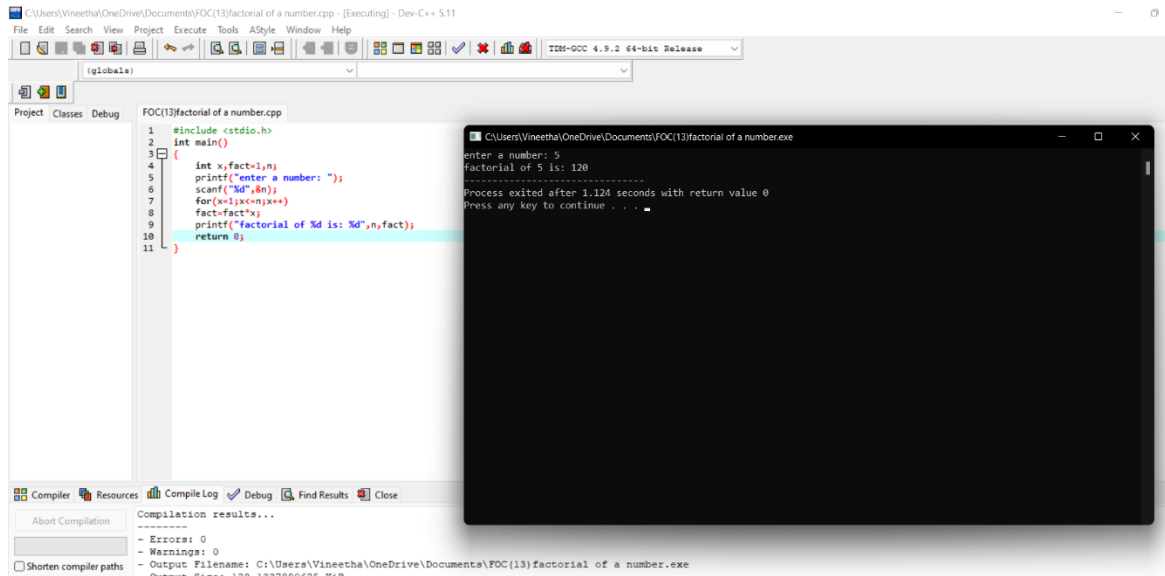
REG.NO:192110487

## 1. Product series (Factorial of a given number)

PROGRAM:

```
#include <stdio.h>

int main()
{
    int x,fact=1,n;
    printf("enter a number: ");
    scanf("%d",&n);
    for(x=1;x<=n;x++)
        fact=fact*x;
    printf("factorial of %d is: %d",n,fact);
    return 0;
}
```

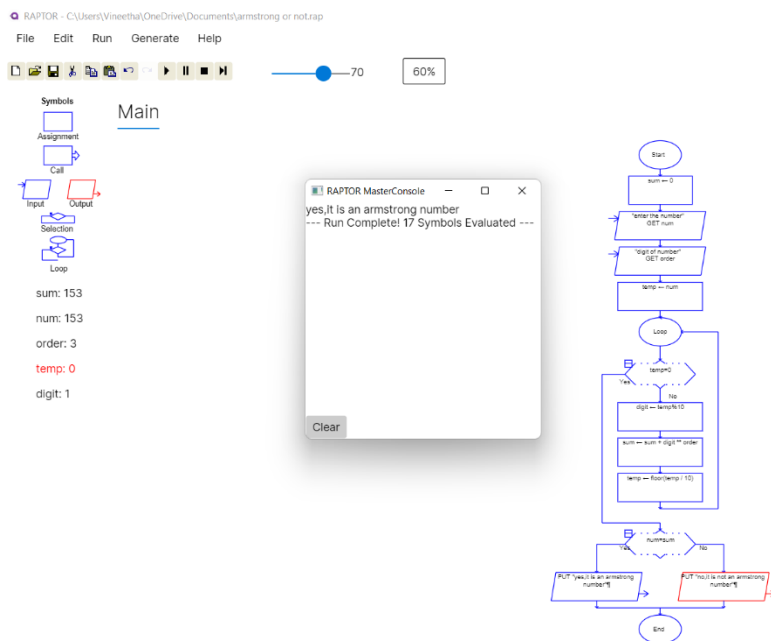
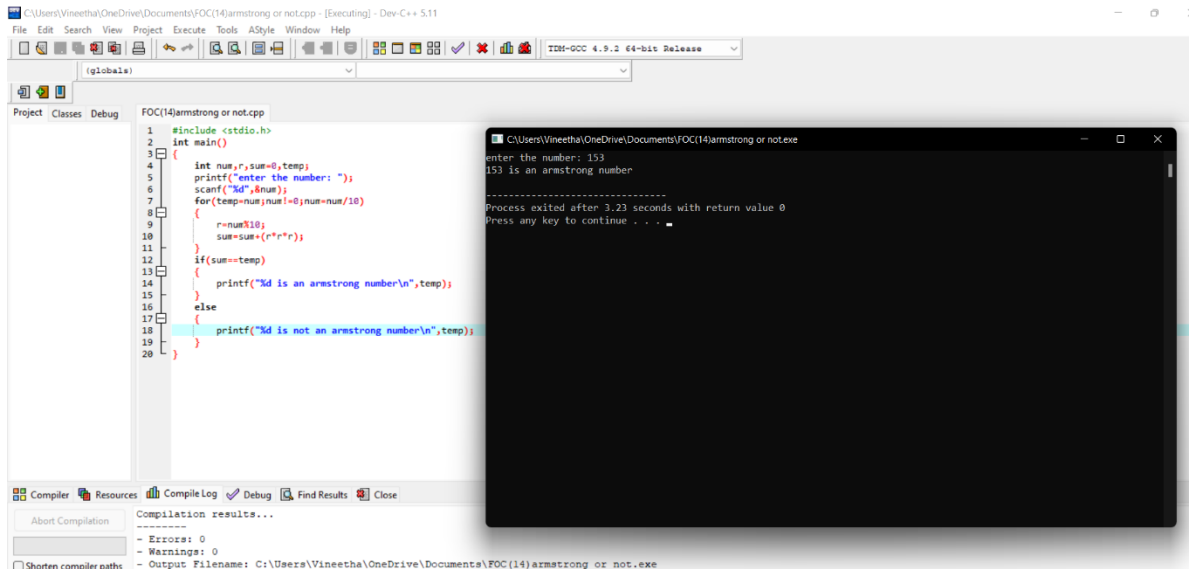


## 2. Given number is Armstrong or not

### PROGRAM:

```
#include <stdio.h>

int main()
{
    int num,r,sum=0,temp;
    printf("enter the number: ");
    scanf("%d",&num);
    for(temp=num;num!=0;num=num/10)
    {
        r=num%10;
        sum=sum+(r*r*r);
    }
    if(sum==temp)
    {
        printf("%d is an armstrong number\n",temp);
    }
    else
    {
        printf("%d is not an armstrong number\n",temp);
    }
}
```



### 3. Summing up any n numbers and finding average

PROGRAM:

```
#include <stdio.h>

int main()
{
    int i,n,sum=0;

    float avg;

    printf("enter the number: ");

    scanf("%d",&n);

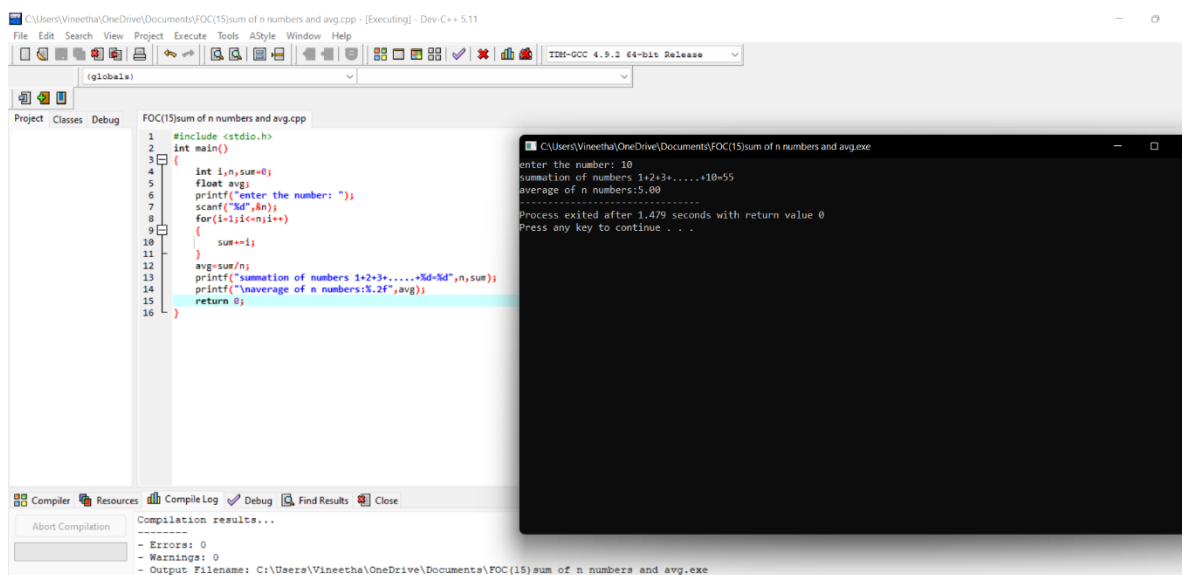
    for(i=1;i<=n;i++)
    {
        sum+=i;
    }

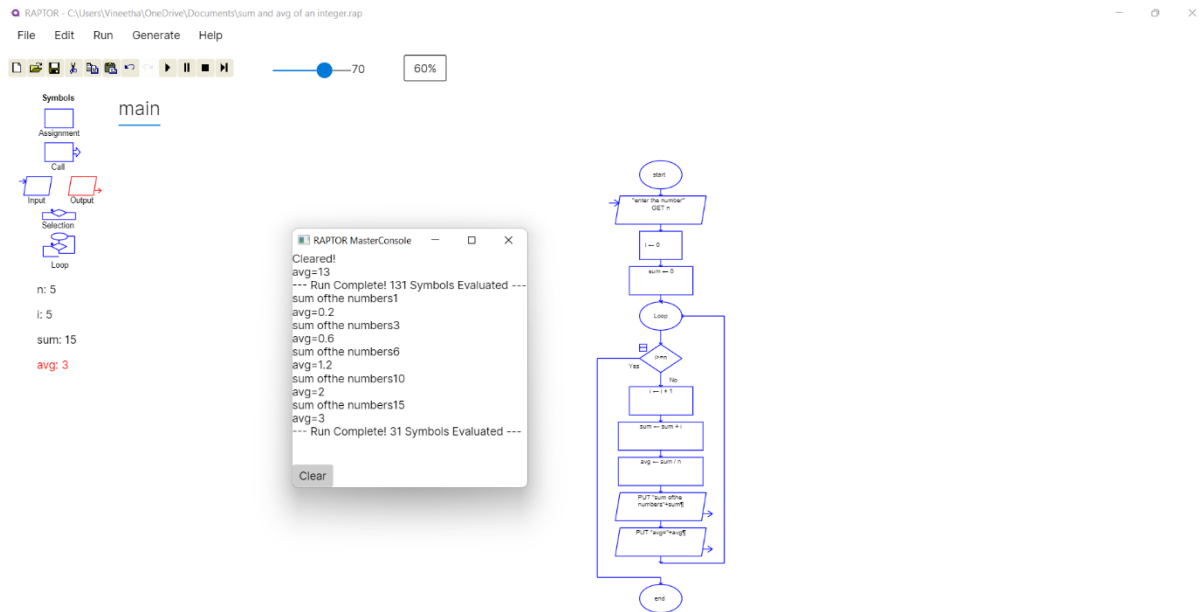
    avg=sum/n;

    printf("summation of numbers 1+2+3+.....+%d=%d",n,sum);

    printf("\naverage of n numbers:%.2f",avg);

    return 0;
}
```





#### 4. Printing digits of an integer number

PROGRAM:

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
    int n,d;
```

```
    printf("enter the number: ");
```

```
    scanf("%d",&n);
```

```
    while(n!=0)
```

```
    {
```

```
        d=n%10;
```

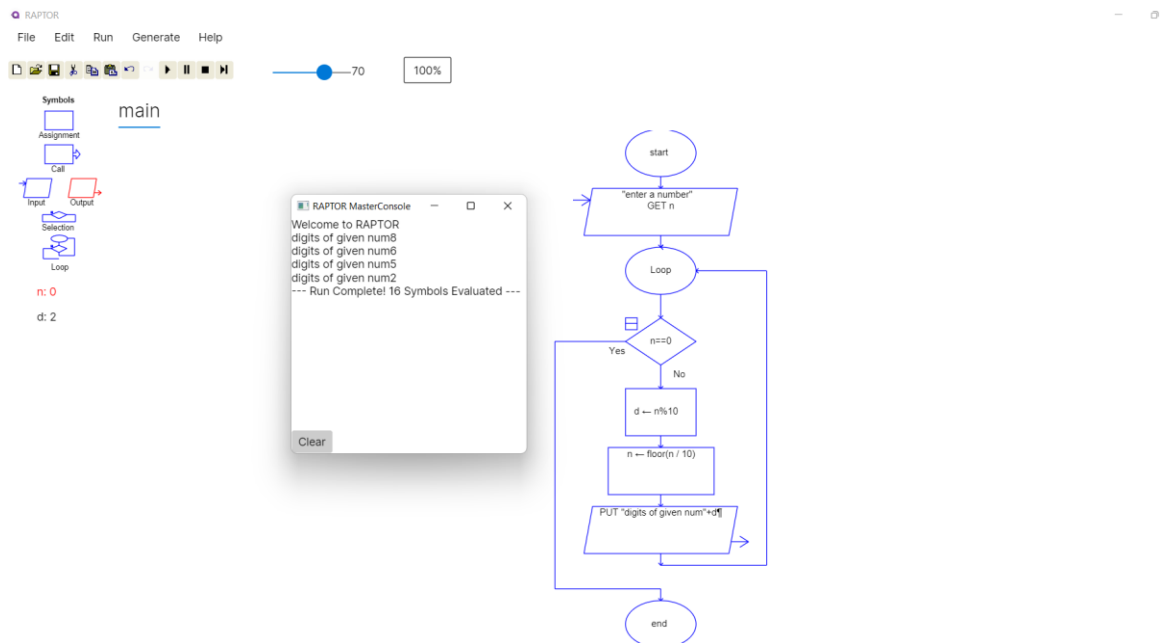
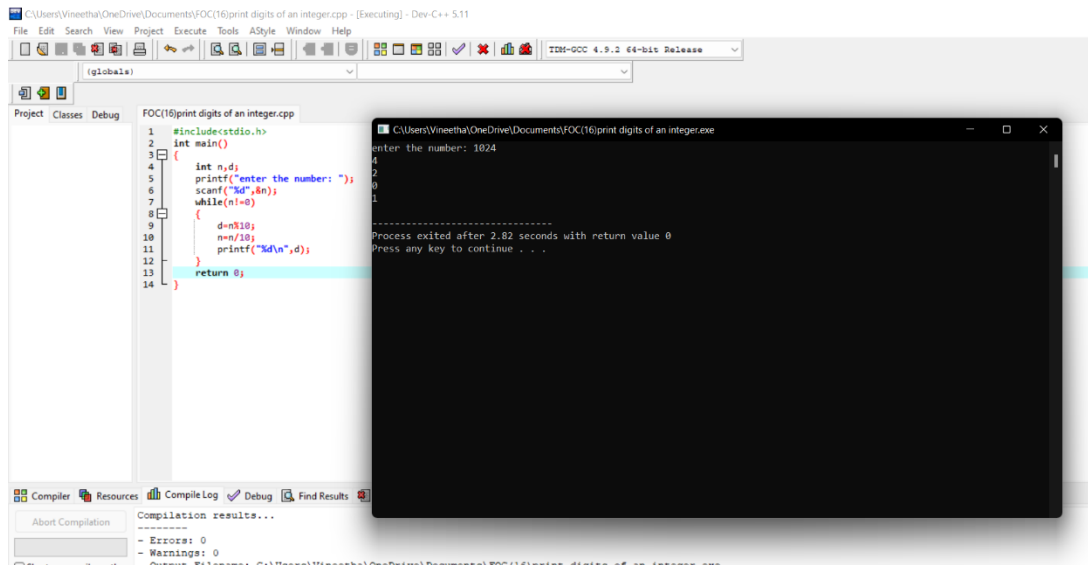
```
        n=n/10;
```

```
        printf("%d\n",d);
```

}

return 0;

}



## 5. Summing up the digits of an integer number

PROGRAM:

```
#include <stdio.h>

int main()
{
    int num,sum=0,rem;

    printf("Enter a number: ");

    scanf("%d",&num);

    while(num!=0)
    {

        rem=num%10;

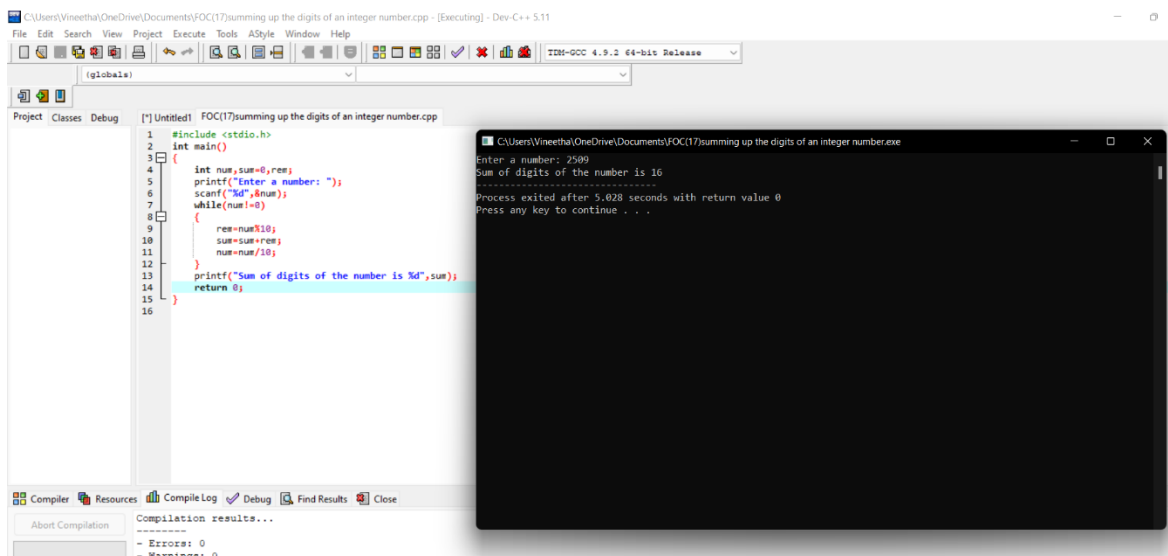
        sum=sum+rem;

        num=num/10;

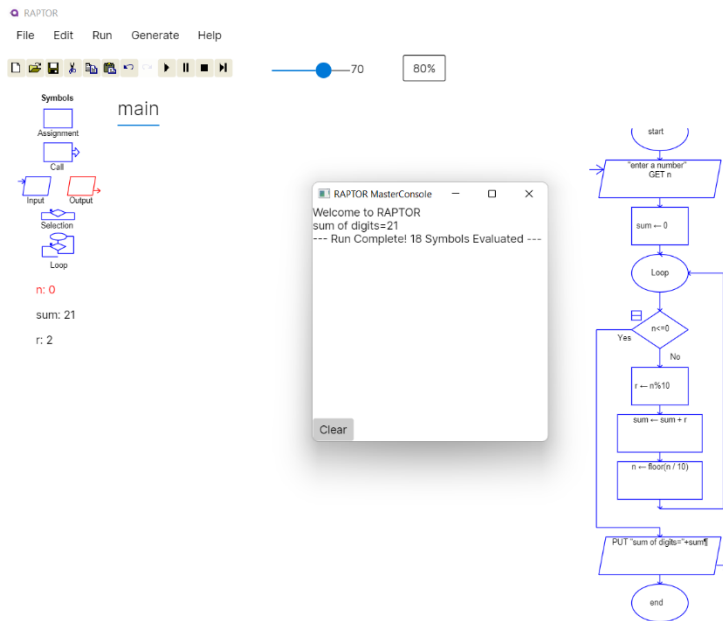
    }

    printf("Sum of digits of the number is %d",sum);

    return 0;
}
```







## 6. Reversing the digits of an integer number

PROGRAM:

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    int n, rev=0, rem;
```

```
    printf("Enter an integer: ");
```

```
    scanf("%d", &n);
```

```
    while(n!=0)
```

```
    {
```

```
        rem=n%10;
```

```
        rev=rev*10+rem;
```

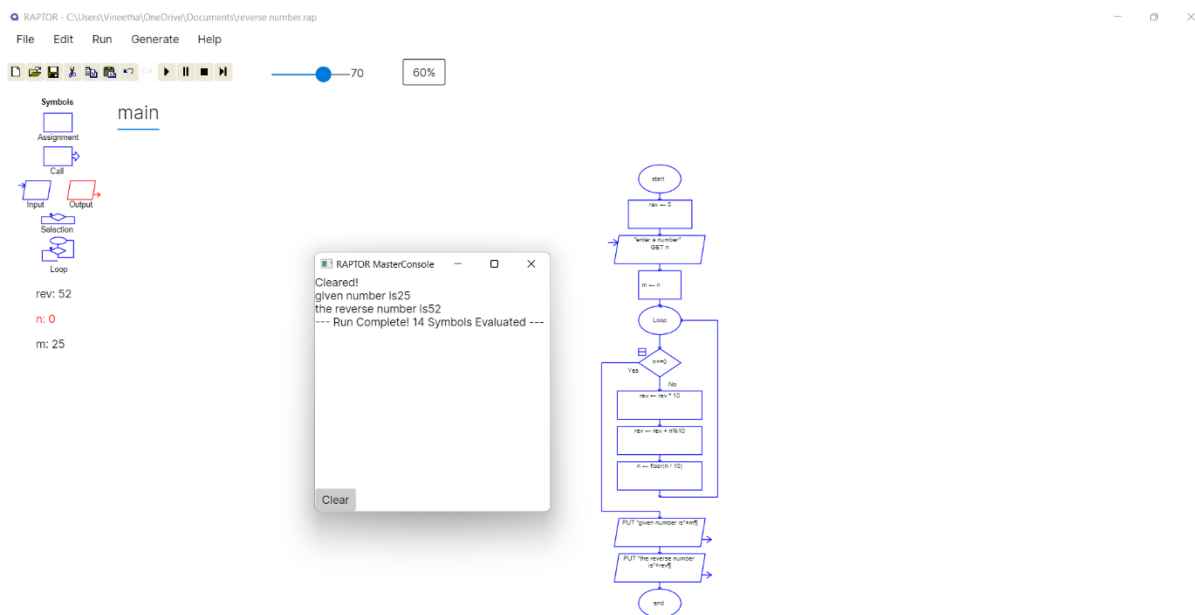
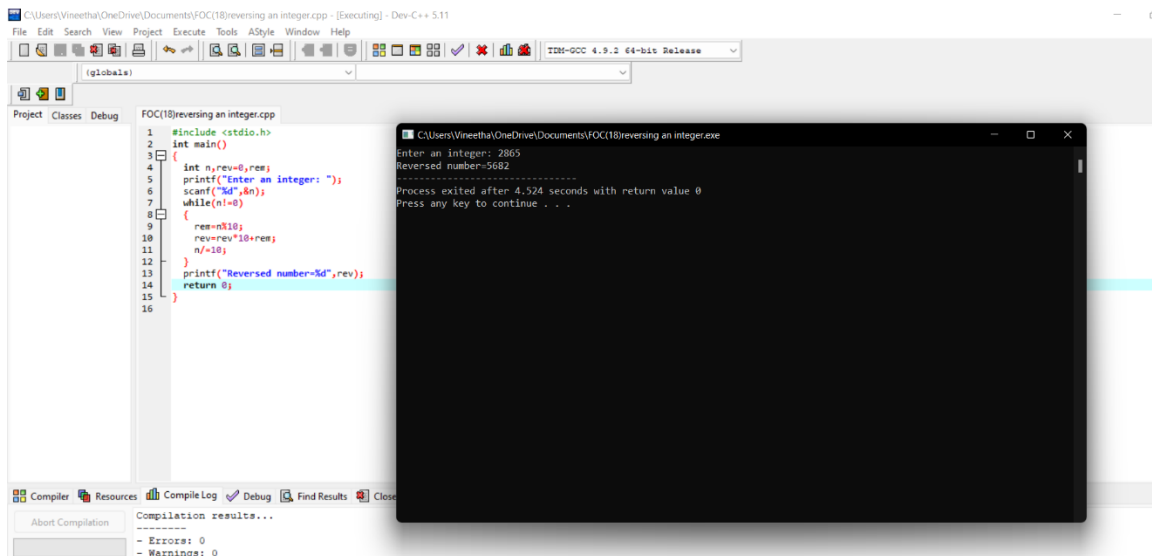
```
        n/=10;
```

```
    }
```

```
    printf("Reversed number=%d", rev);
```

```
    return 0;
```

```
}
```



## 7. Finding the given integer is positive or negative

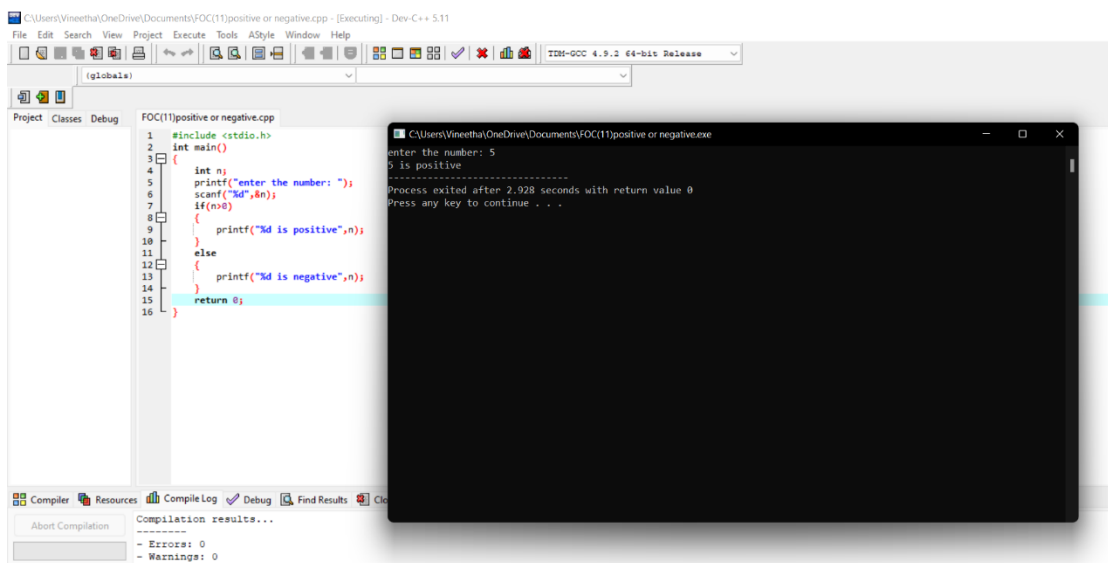
PROGRAM:

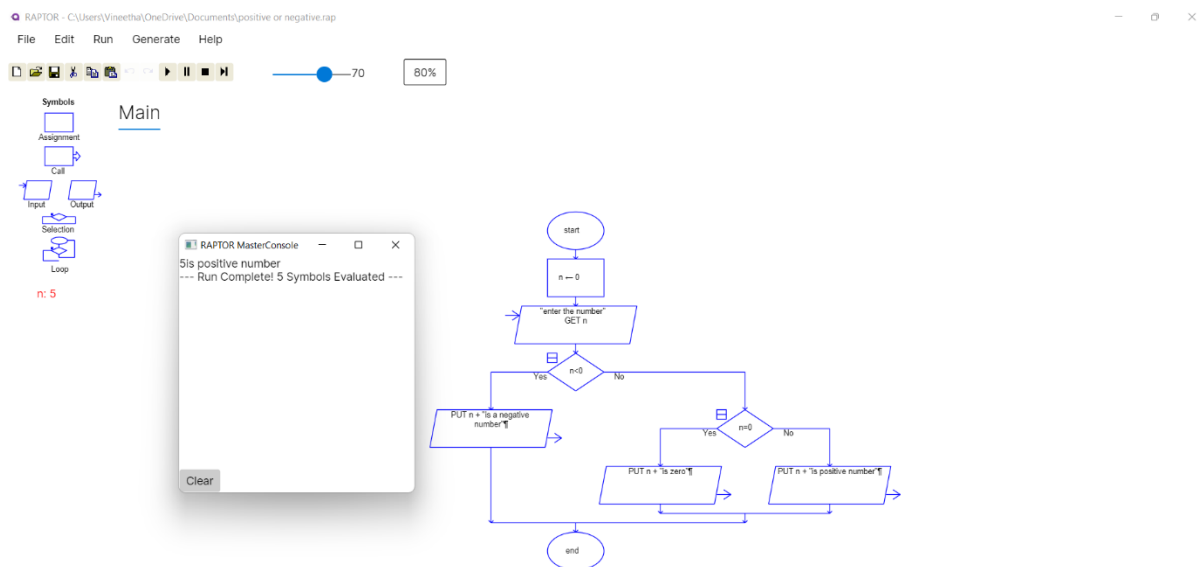
```
#include <stdio.h>

int main()
{
    int n;

    printf("enter the number: ");
    scanf("%d",&n);
    if(n>0)
    {
        printf("%d is positive",n);
    }
    else
    {
        printf("%d is negative",n);
    }

    return 0;
}
```





## 8. Swapping two numbers with a temporary variable

**PROGRAM:**

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
    int x,y,temp;
```

```
    printf("Enter the value of x and y: ");
```

```
    scanf("%d %d",&x,&y);
```

```
    printf("Before swapping x=%d, y=%d ",x,y);
```

```
    temp=x;
```

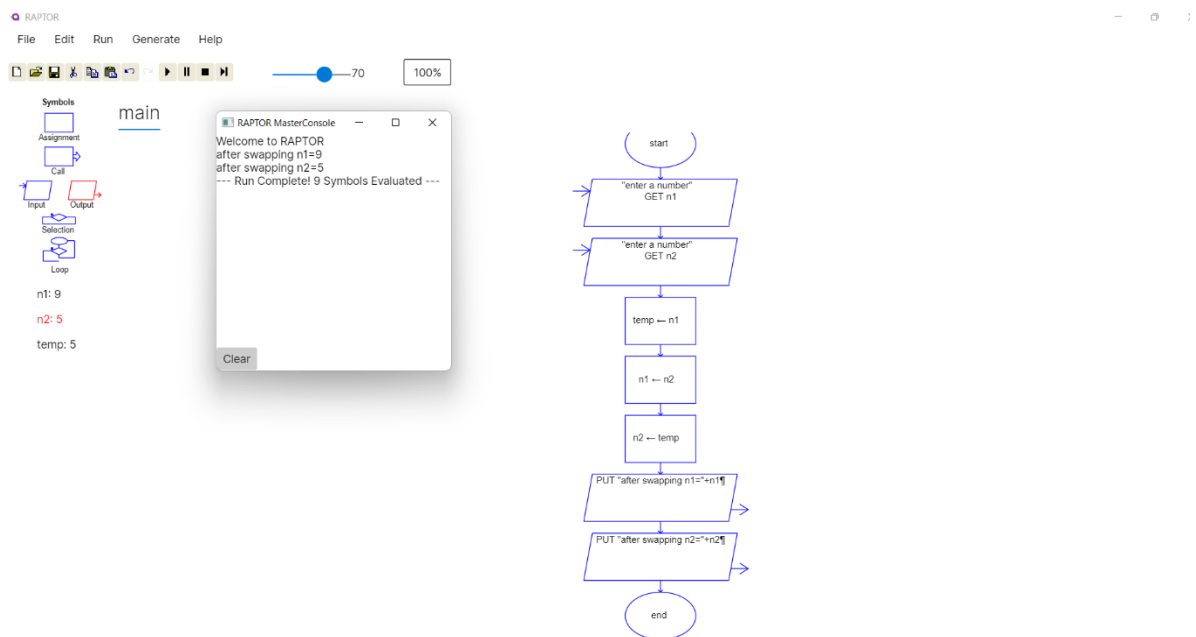
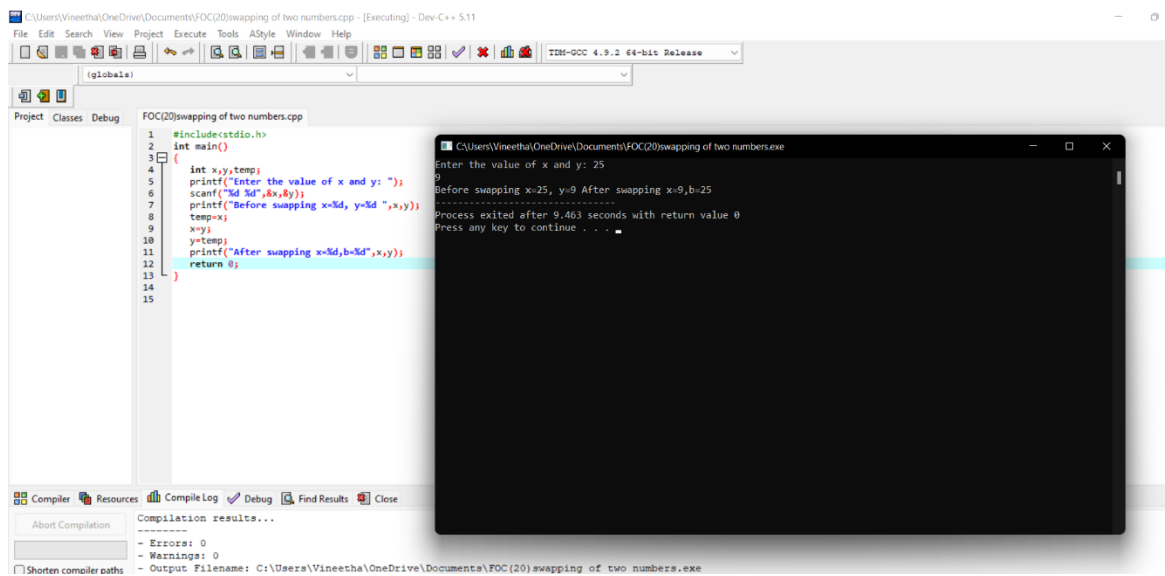
```
    x=y;
```

```
    y=temp;
```

```
    printf("After swapping x=%d,b=%d",x,y);
```

```
    return 0;
```

```
}
```



## 9. summing of square of n numbers

PROGRAM:

```
#include <stdio.h>

int main()
{
    int i,n,sum=0;

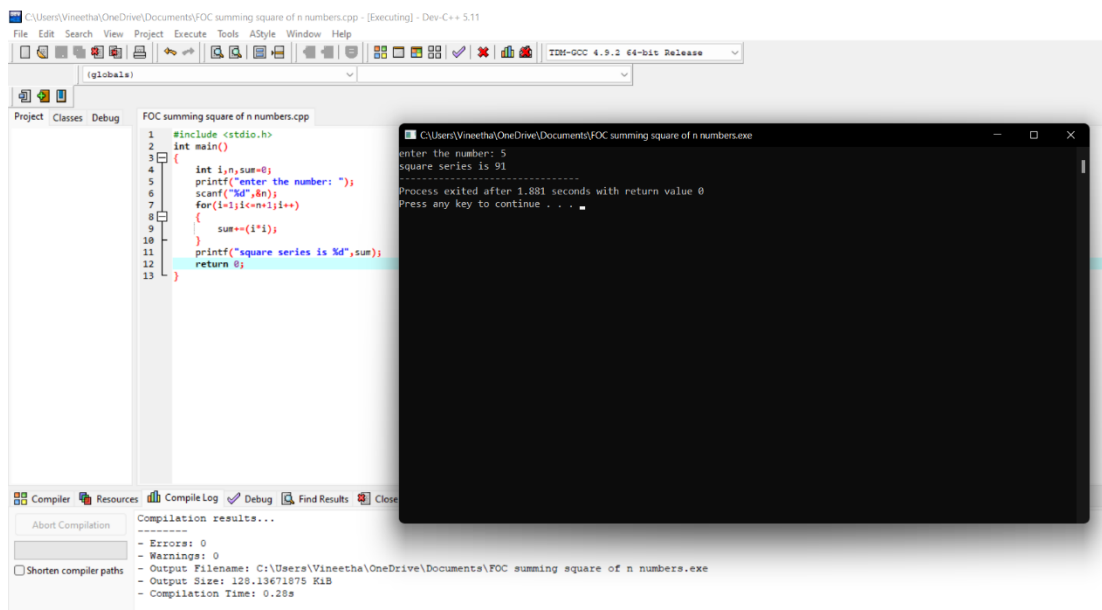
    printf("enter the number: ");

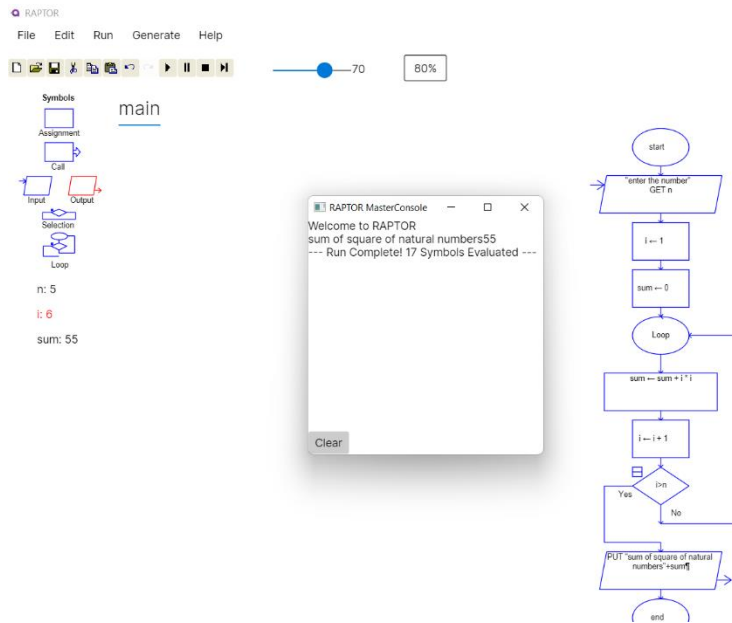
    scanf("%d",&n);

    for(i=1;i<=n+1;i++)
    {
        sum+=(i*i);
    }

    printf("square series is %d",sum);

    return 0;
}
```





## 10. Summing of square of even series

### PROGRAM:

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    int i,n,sum=0;
```

```
    printf("enter the number: ");
```

```
    scanf("%d",&n);
```

```
    for(i=1;i<=n;i+=2)
```

```
    {
```

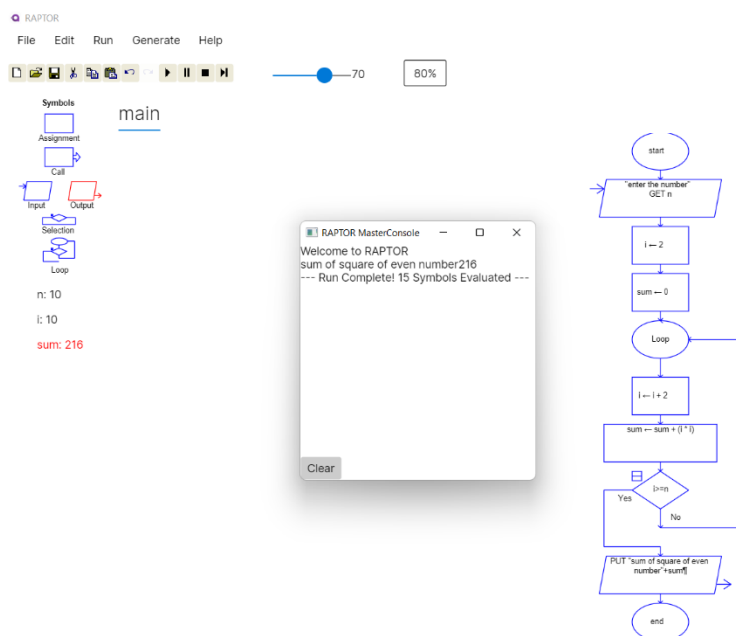
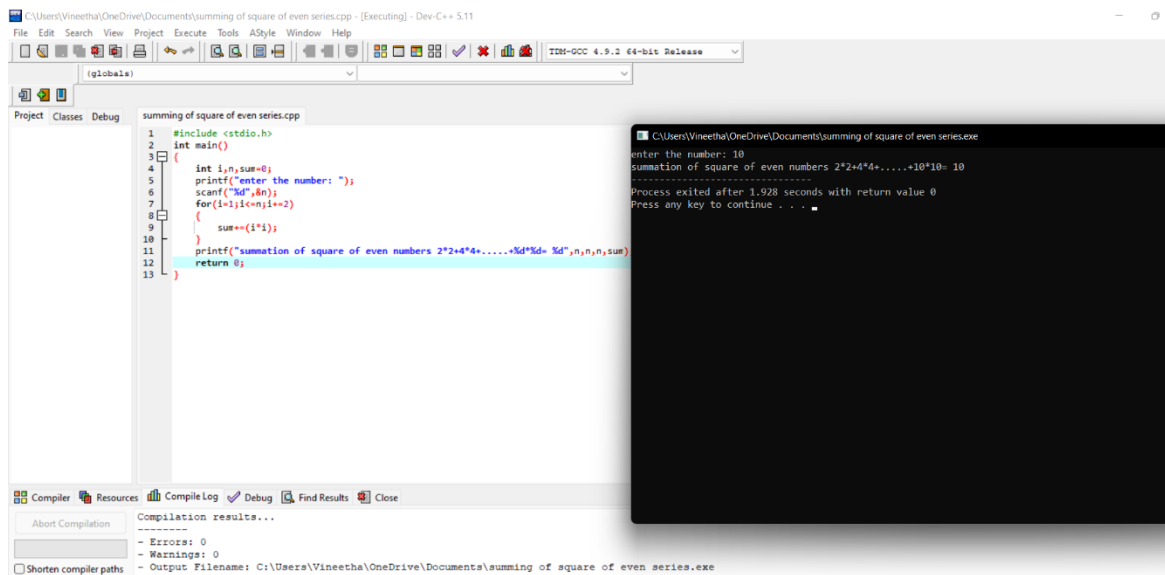
```
        sum+=(i*i);
```

```
    }
```

```
    printf("summation of square of even numbers 2*2+4*4+.....+%d*%d= %d",n,n,n,sum);
```

```
    return 0;
```

```
}
```



## 11. Summing of square of odd series

### PROGRAM:

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    int i,n,sum=0;
```

```
    printf("enter the number: ");
```

```
    scanf("%d",&n);
```



```

for(i=1;i<=n;i+=2)
{
    sum+=(i*i);
}

printf("summation of square of odd numbers 1*1+3*3+.....+%d*%d= %d",n,n,n,sum);

return 0;
}

```

