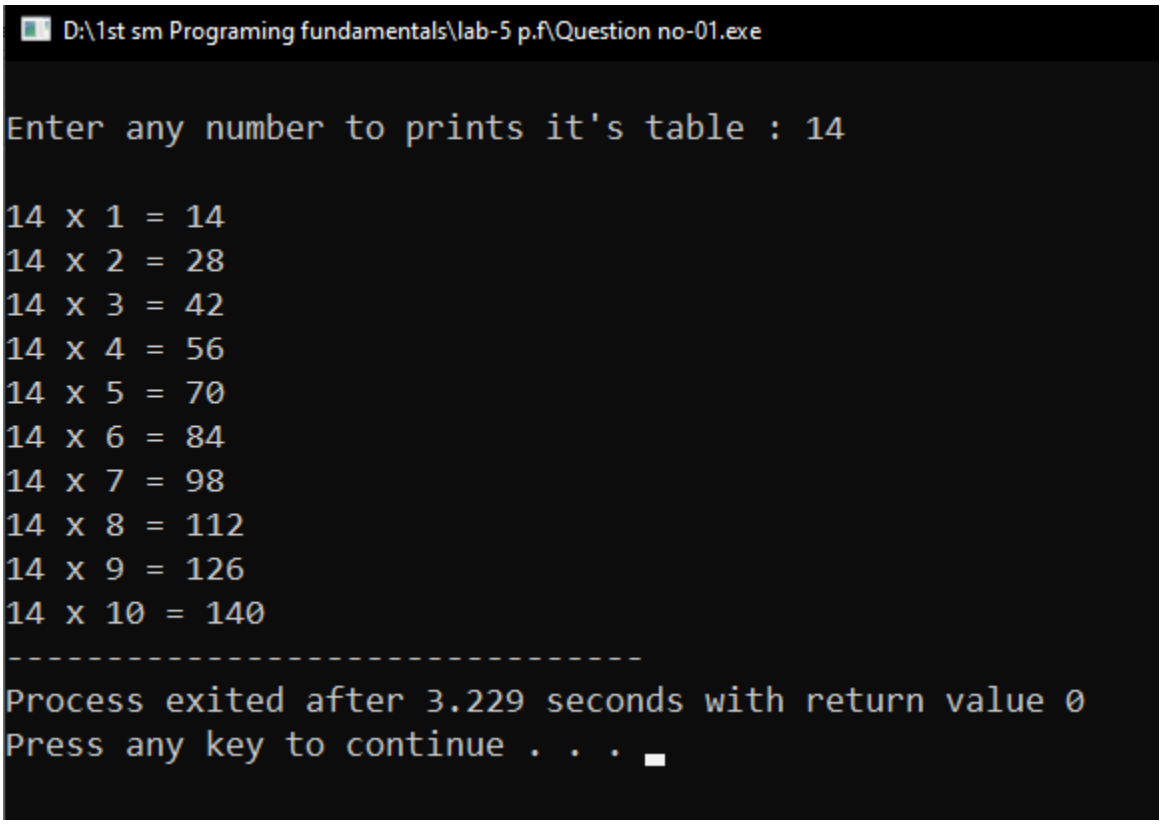
Task no_01

```
#include <iostream>

using namespace std;


int main()

{

	int table_num;


	cout<<endl<<"Enter any number to prints it's table : ";

	cin>>table_num;


	for(int i=1;i<=10;i++)

	cout<<endl<< table_num <<" x "<< i <<" = "<< table_num*i;


return 0;
```

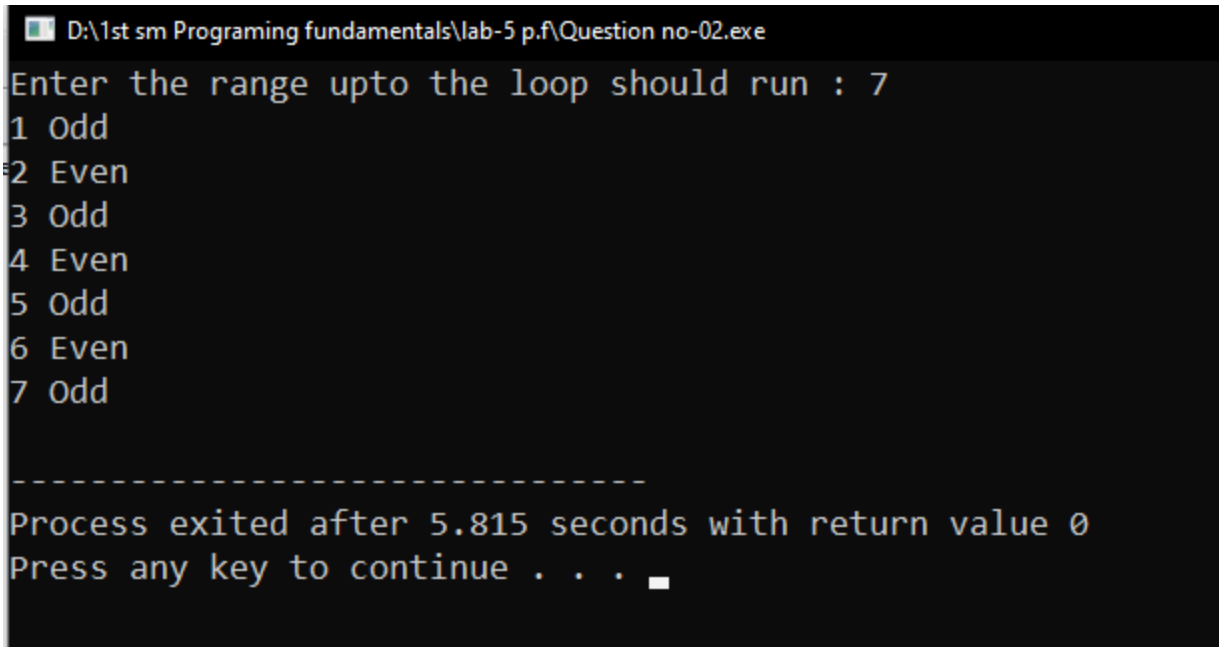
}



Task no_02

```
#include <iostream>

using namespace std;


int main()

{

	int  num;

	cout<<"Enter the range upto the loop should run : ";

	cin>>num;
```

```
        for(int i=1;i<=num;i++)
        {

                if(i%2==0)
                {
                        cout<<i<<" Even ";
                        cout<<endl;
                }

                else if (i%2!=0)
                {
                        cout<<i<<" Odd ";
                        cout<<endl;
                }




        }

return 0;
}
```

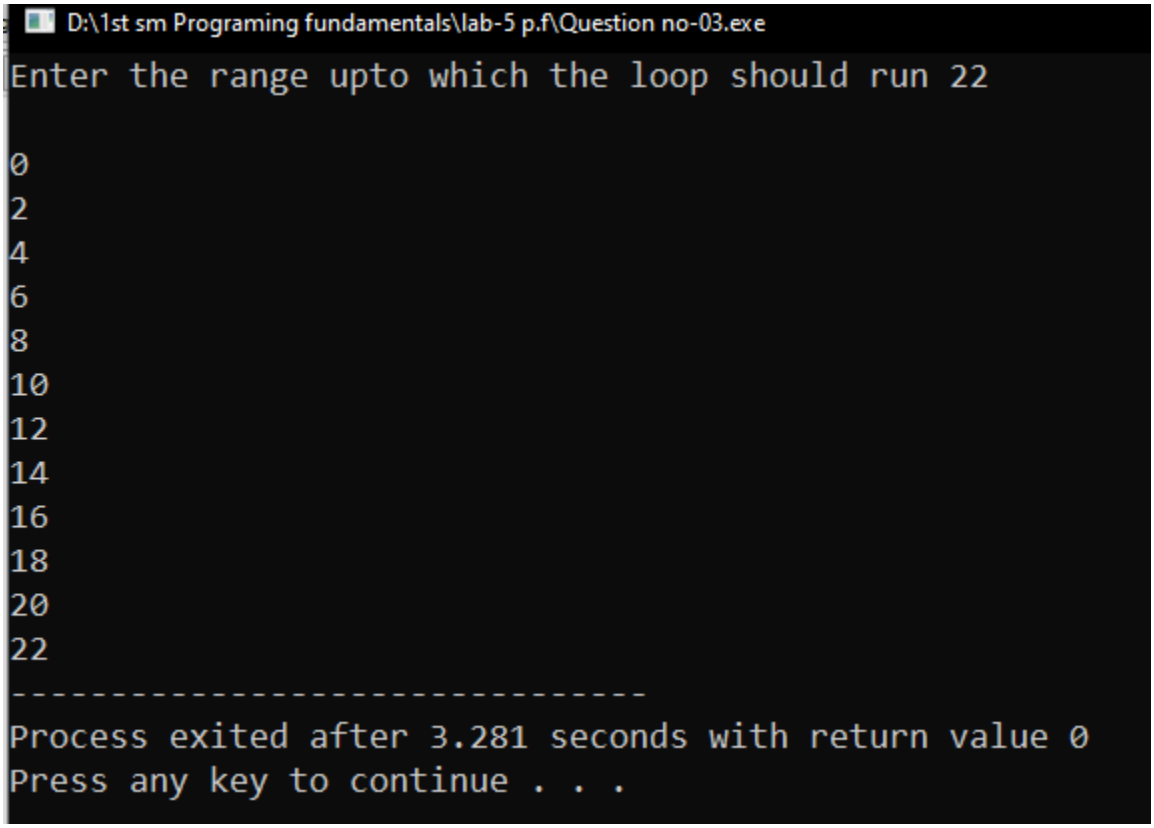


Task no_03

```
#include <iostream>

using namespace std;


int main()

{

	int num;


	cout<<"Enter the range upto which the loop should run ";

	cin>>num;


	for(int i=0 ; i<=num ; i+=2)

	{

		cout<<endl<<i;

	}
```

return 0;

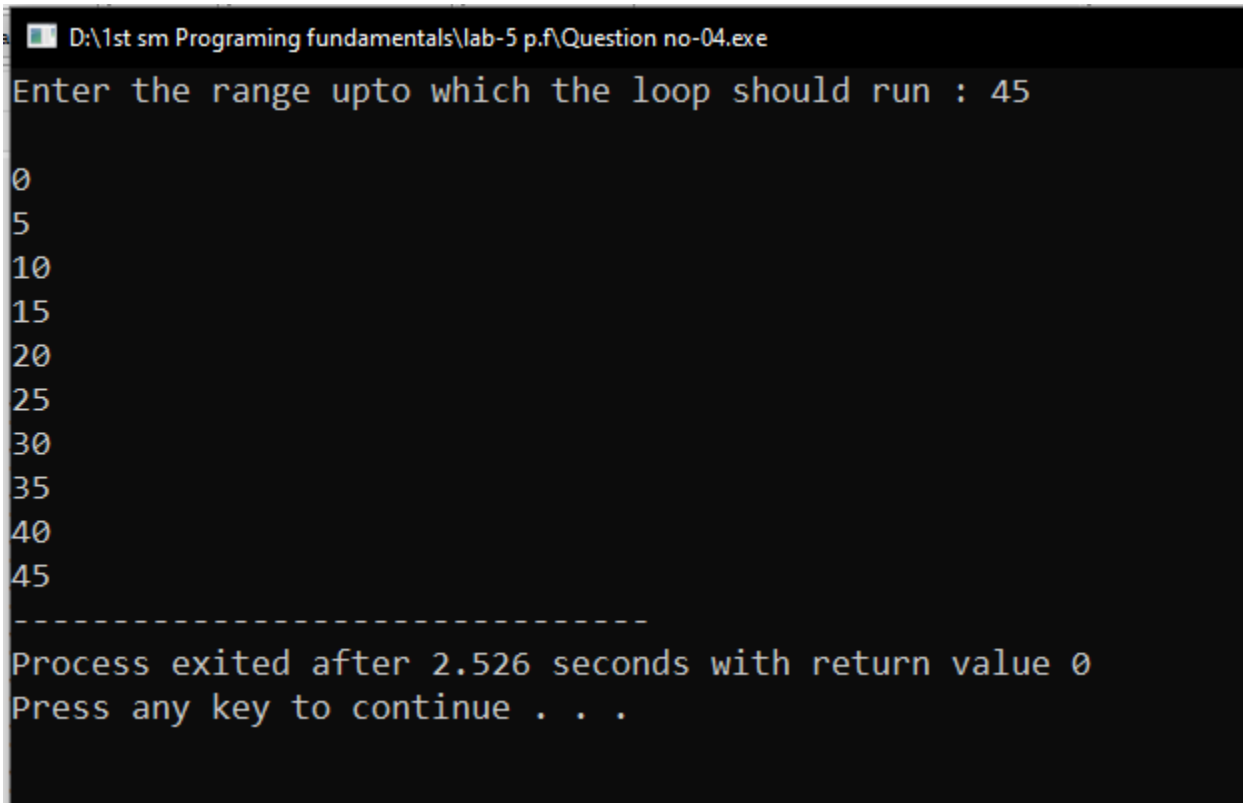
}



Task no_04

```
#include <iostream>

using namespace std;


int main()

{

        int num;


        cout<<"Enter the range upto which the loop should run : ";

        cin>>num;


        for(int i=0;i<=num;i+=5)
```

```
        {
                if(num%5==0)
                {
                        cout<<endl<<i;


                }
        }


return 0;

}
```



Task no_05 a

```
#include <iostream>

using namespace std;
```

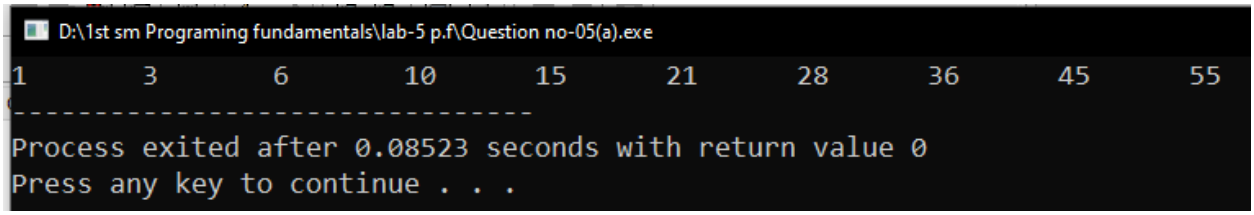
```
int main()
{
	int  sum=0;

	for(int i=1;i<=10;i++)
	{
		sum+=i;
		cout<<sum<<"\t";

	}

return 0;
}
```

```
D:\1st sm Programing fundamentals\lab-5 p.f\Question no-05(a).exe
1       3       6       10      15      21      28      36      45      55
--------------------------------
Process exited after 0.08523 seconds with return value 0
Press any key to continue . . .
```

Task no_05 b

```
#include <iostream>

using namespace std;


int main()
{
	int sum=0 , i=1 ;

	while(i<=10)
	{
		sum=sum+i;
```

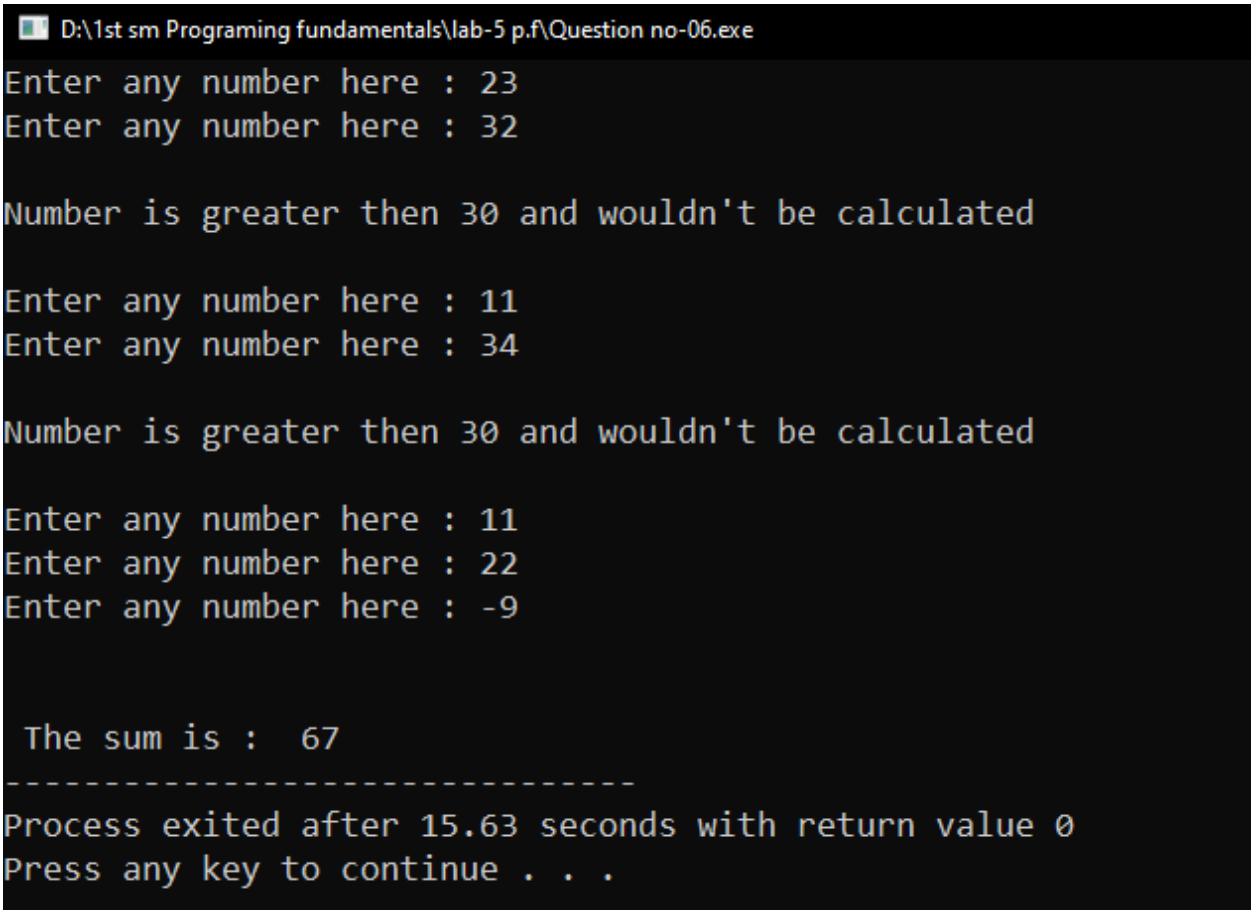
```
            cout<<"\t"<<sum;
            i++;

        }

return 0;
}
```



Task no_06

```
#include <iostream>
using namespace std;

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


        while(num>=0 && num<=30)
   {    if(num>=0 && num<=30)
        {
            sum+=num;
        cout<<"Enter any number here : ";
        cin>>num;
        }
```

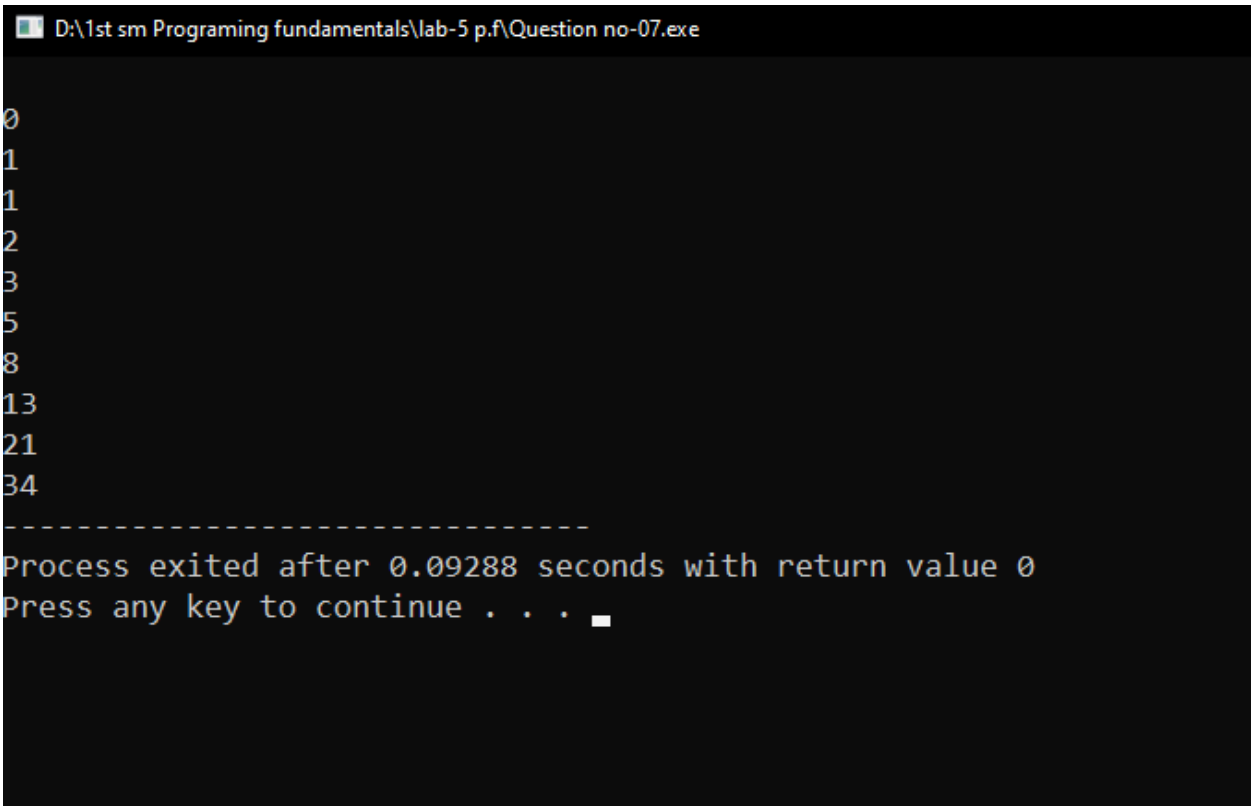
```
        if(num>30)
                {
                cout<<endl<<"Number is greater then 30 and wouldn't be calculated";
                cout<<"\n\nEnter any number here : ";
        cin>>num;
                }
   }

    cout<<"\n\n The sum is :  " <<sum;




return 0;
}
```



Task no_07

```
#include <iostream>

using namespace std;


int main()

{

	int num , a=0 , b=1 , c;


	for(c=0;c<=35;c=a+b)

	{

		a=b;

		b=c;
```

```
            cout<<endl<<c;
        }

return 0;
}
```



Task no_08

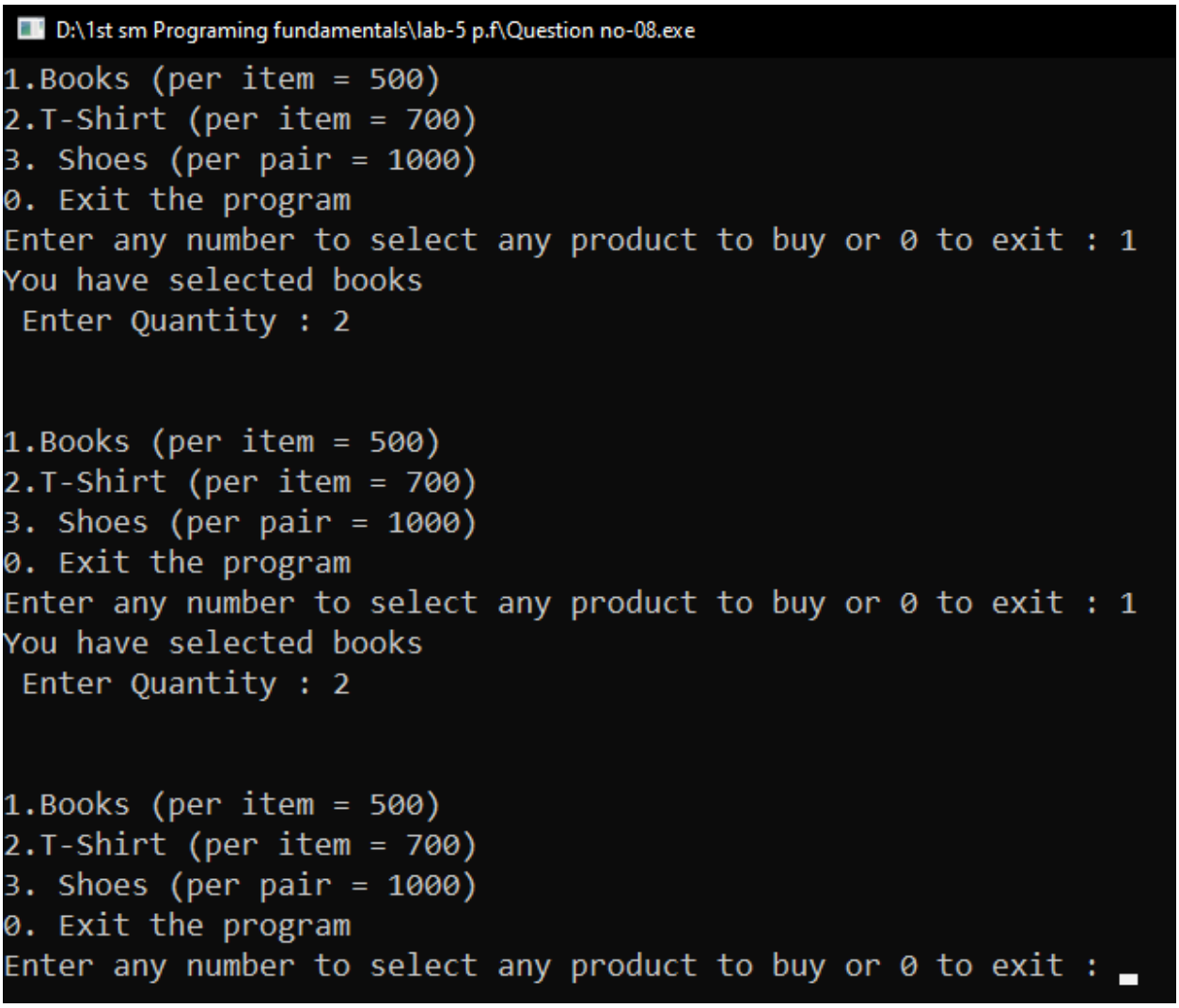
```
#include <iostream>

using namespace std;


int main()

{
        int num , a=0 , b=0 , c=0 ;
```

```
int priceA=0 , priceB=0 , priceC=0 ,quanA=0 , quanB=0 , quanC=0 ;
cout<<"1.Books (per item = 500)";
cout<<endl;
cout<<"2.T-Shirt (per item = 700)";
cout<<endl;
cout<<"3. Shoes (per pair = 1000)";
cout<<endl;
cout<<"0. Exit the program";
cout<<endl;
cout<<"Enter any number to select any product to buy or 0 to exit : ";
cin>>num;

while(num>0 && num <= 3)
{



if(num==1)
{
        cout<<"You have selected books  ";
        cout<<"\n Enter Quantity : ";
        cin>>a;
        cout<<endl<<endl;
        quanA+=a;
        priceA=quanA*(500);
        cout<<"1.Books (per item = 500)";
        cout<<endl;
        cout<<"2.T-Shirt (per item = 700)";
        cout<<endl;
        cout<<"3. Shoes (per pair = 1000)";
```

```
        cout<<endl;
        cout<<"0. Exit the program";
        cout<<endl;
        cout<<"Enter any number to select any product to buy or 0 to exit : ";
        cin>>num;



}

if(num==2)
{
        cout<<"You have selected T-Shirt ";
        cout<<"\n Enter Quantity : ";
        cin>>b;
        cout<<endl<<endl;
        quanB+=b;
        priceB=quanB*(700);
        cout<<"1.Books (per item = 500)";
        cout<<endl;
        cout<<"2.T-Shirt (per item = 700)";
        cout<<endl;
        cout<<"3. Shoes (per pair = 1000)";
        cout<<endl;
        cout<<"0. Exit the program";
        cout<<endl;
        cout<<"Enter any number to select any product to buy or 0 to exit : ";
        cin>>num;

}
```

```
if(num==3)
{
        cout<<"You have selected Shoes ";
        cout<<"\n Enter Quantity : ";
        cin>>c;
        cout<<endl<<endl;
        quanC+=c;
        priceC=quanC*(1000);
        cout<<"1.Books (per item = 500)";
        cout<<endl;
        cout<<"2.T-Shirt (per item = 700)";
        cout<<endl;
        cout<<"3. Shoes (per pair = 1000)";
        cout<<endl;
        cout<<"0. Exit the program";
        cout<<endl;
        cout<<"Enter any number to select any product to buy or 0 to exit : ";
        cin>>num;

}




}

if(num<0)
{
        cout<<endl<<"Invalid entry!!";
```

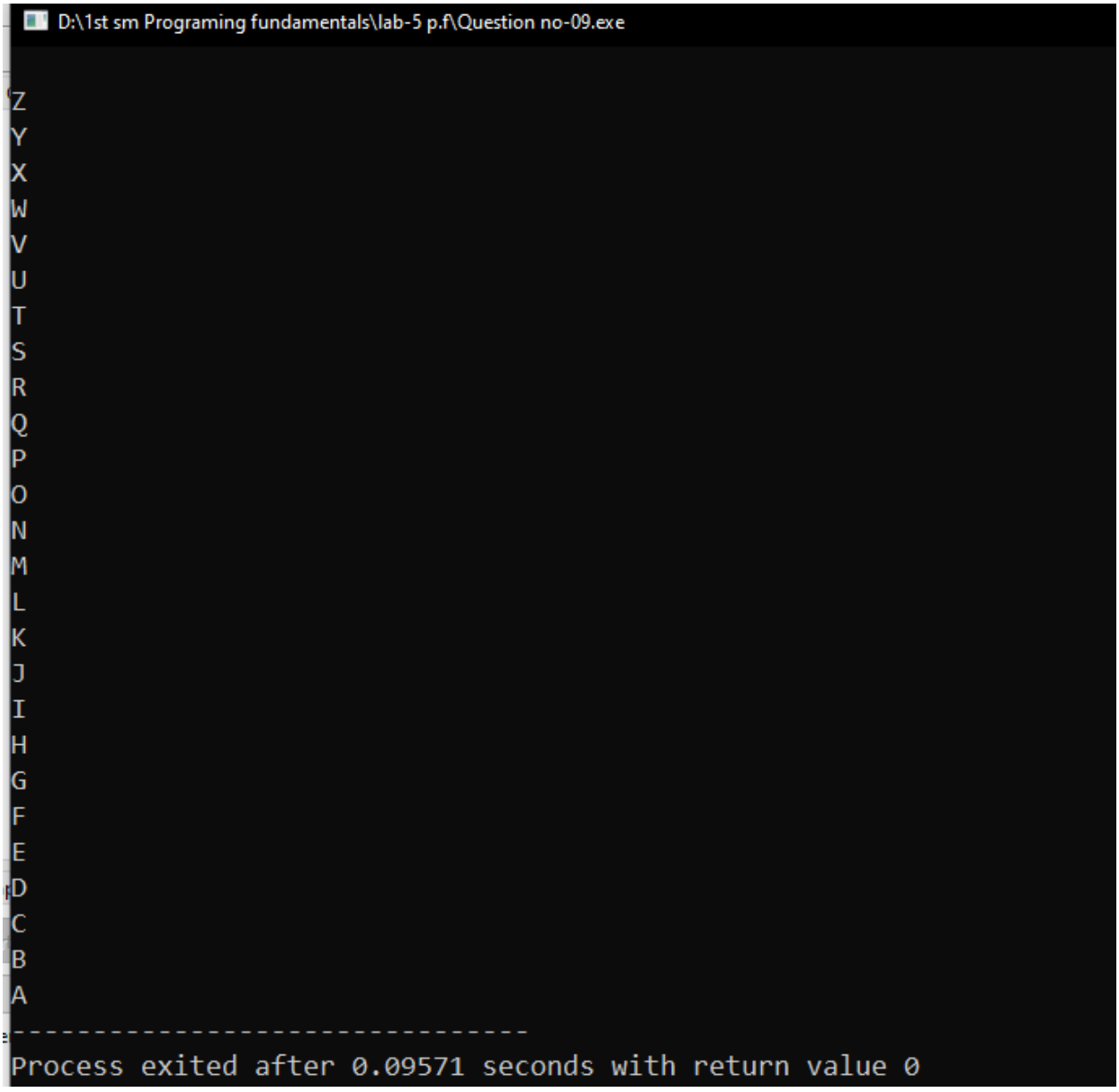
```
        }



        cout<<endl<<"You have bought "<< quanA << " Books "<<" (Price "<<priceA<<")";
        cout<<endl<<"You have bought "<< quanB << " T-shirts "<<"(Price "<<priceB<<")";
        cout<<endl<<"You have bought "<< quanC << " Shoes "<<"(Price "<<priceC<<")";
        cout<<endl<<" Total "<<" = "<<priceA+priceB+priceC;



return 0;
}
```



Task no_9

```
#include <iostream>

using namespace std;


int main()

{

	char alpha ;

	for(alpha='Z';alpha>='A';alpha--)

	{

		cout<<endl<<alpha;
```

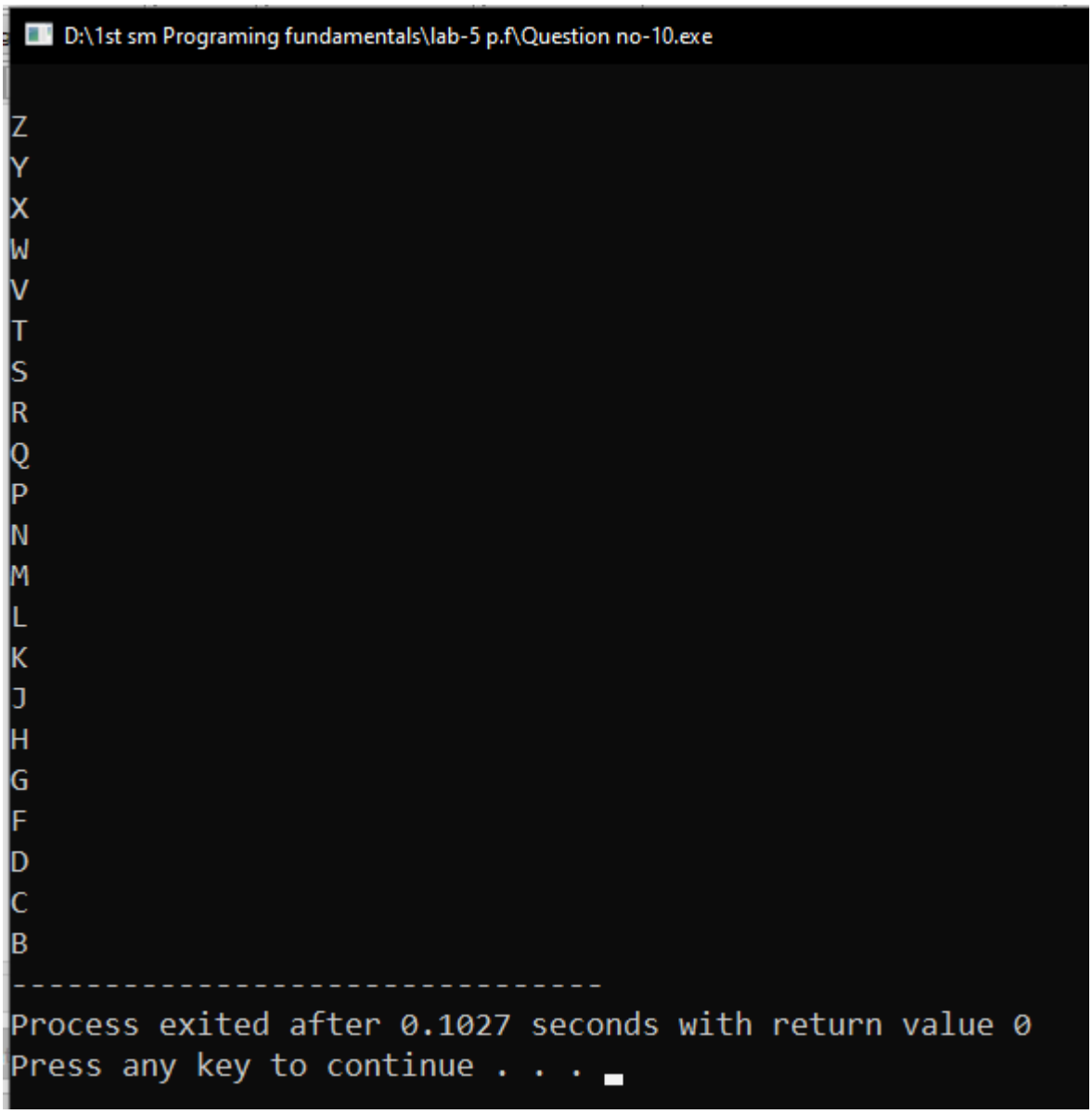
```
        }


return 0;

}
```



Task no_10

```
#include <iostream>

using namespace std;
```

```
int main()
{
	char alpha ;
	for(alpha='Z';alpha>='A';alpha--)
	{
		if(alpha!='A'&&alpha!='E'&&alpha!='I'&&alpha!='O'&&alpha!='U')
		{
			cout<<endl<<alpha;
		}

	}

return 0;
}
```

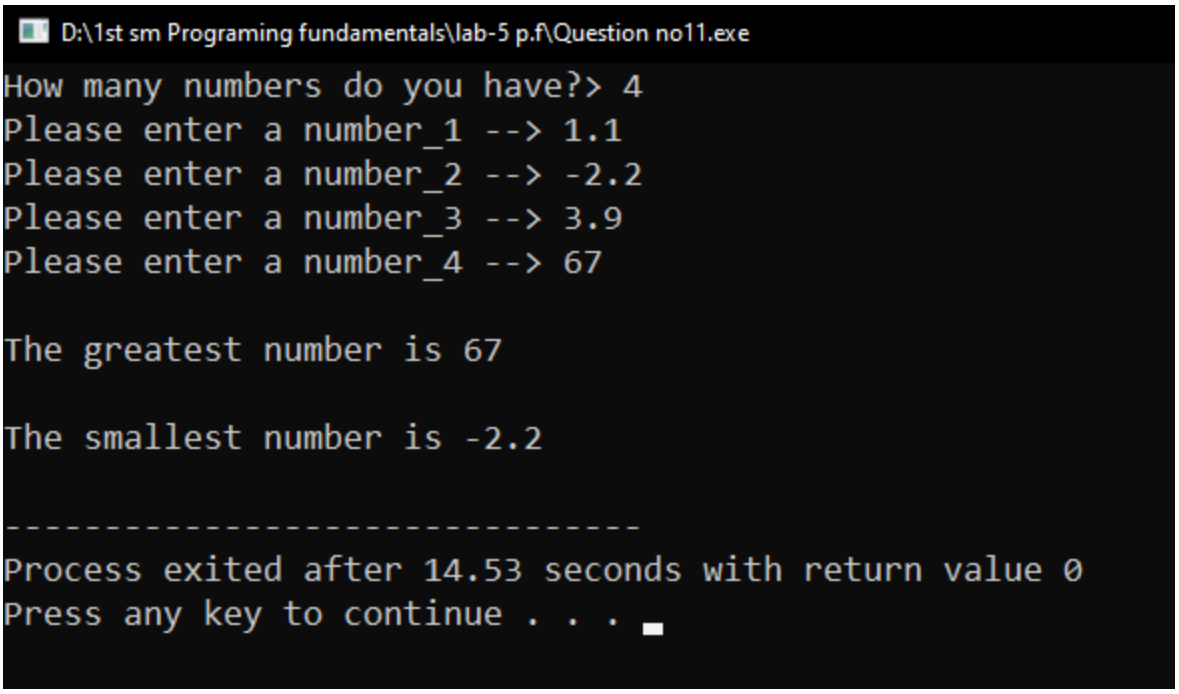


Task no_11

```
#include <iostream>

using namespace std;


int main()

{

	int num;

	cout<<"How many numbers do you have?> ";
```

```
cin>>num;

if(num<0)
{
cout<<"Sorry, you have entered an invalid input.";
cout<<"\nThank-you.";
}

if(num==0)
{
cout<<"Opps, you don't have any number for me to process.";
cout<<"\nThank-you.";
}

if(num>0)
{
        float a, max , min;
        int inp  ;

 for(inp=1;inp<=num;inp++)
 {
        cout<<"Please enter a number_"<<inp<<" --> ";
        cin>>a;

        if(inp==1)
        {
                min=a;
                max=a;
        }
```

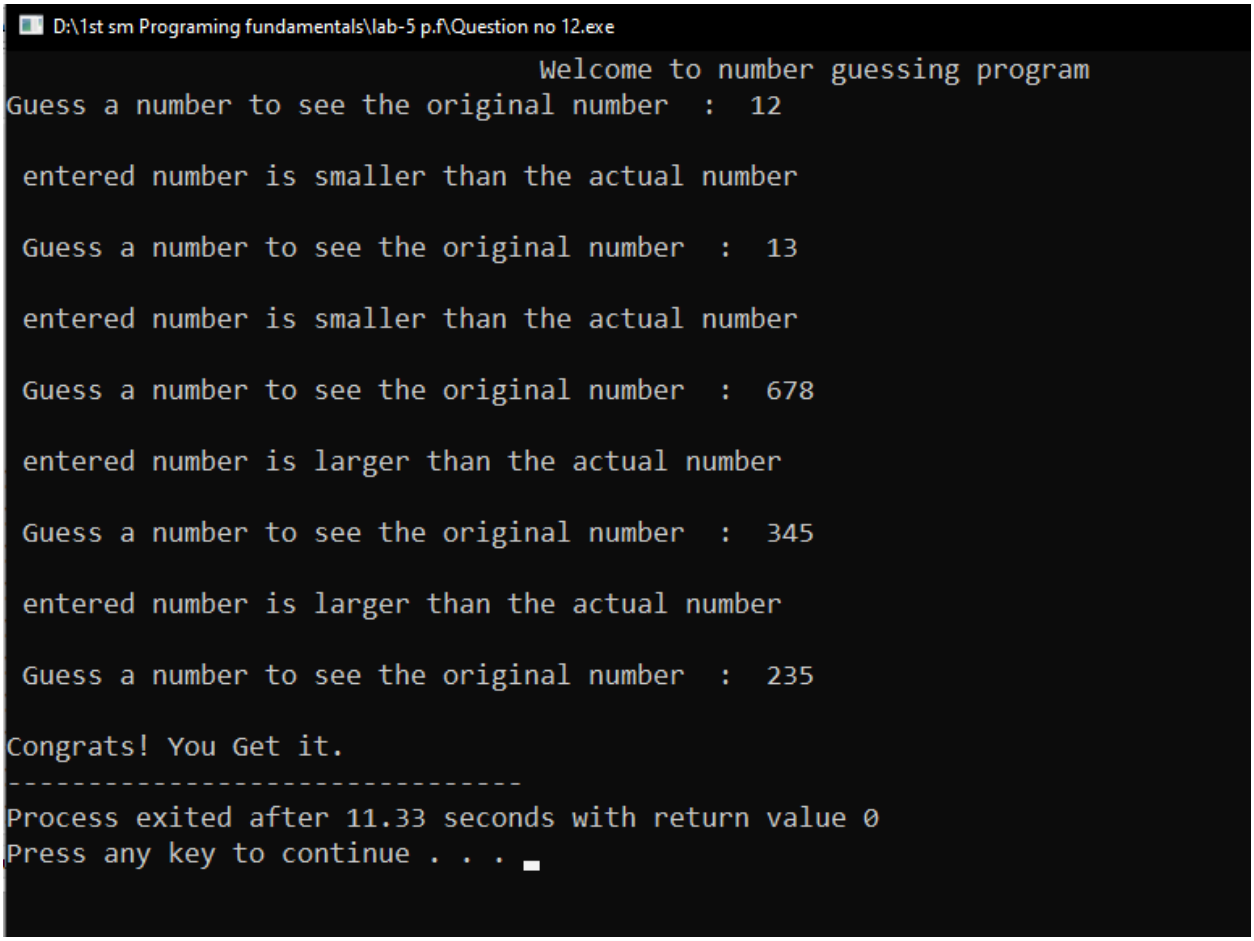
```
            if(a<min)
            {
                  min=a;
            }
            if(a>max)
            {
                  max=a;
            }
      }




            cout<<endl<<"The greatest number is "<<max<<endl;
            cout<<endl<<"The smallest number is "<<min<<endl;
      }

return 0;
}
```



Task no_12

```
#include <iostream>

using namespace std;


int main()

{

	cout<<"\t\t\t\t Welcome to number guessing program";

	cout<<endl;


	int O_no=235 , G_no;

	cout<<"Guess a number to see the original number  :  ";

	cin>>G_no;


	while(G_no!=O_no)

	{

		if(G_no<O_no)

		{
```

```
                cout<<"\n entered number is smaller than the actual number";
                cout<<"\n \n Guess a number to see the original number  :  ";
                cin>>G_no;
        }

        if(G_no>O_no)
        {
                cout<<"\n entered number is larger than the actual number";
                cout<<"\n \n Guess a number to see the original number  :  ";
                cin>>G_no;
        }
    }

    if(G_no==O_no)
    {
        cout<<"\nCongrats! You Get it.";
    }

return 0;
}
```



Task no_13

```
#include <iostream>

using namespace std;



int main()

{

	cout<<"\t\t\t\t Welcome to number guessing program\n";

	cout<<"\n You have five guesses to guess the number between (1-100) Other wise the number will be shown";

	cout<<endl<<endl;
```

```
int O_no=93 , G_no , guesses=1;
cout<<"Guess a number between (1-100) to see the original number  :  ";
cin>>G_no;

while(G_no!=O_no && guesses<5)
{
        if(G_no<O_no)
        {
                cout<<"\n entered number is smaller than the actual number"<<endl<<endl;
                cout<<"Guess a number between (1-100) to see the original number  :  ";
                cin>>G_no;
                guesses++;
        }

        if(G_no>O_no)
        {
                cout<<"\n entered number is larger than the actual number"<<endl<<endl;
                cout<<"Guess a number between (1-100) to see the original number  :  ";
                cin>>G_no;
                guesses++;
        }
}

if(guesses>=5)
{
        cout<<"\n Sorry "<<" The right number was : "<<O_no;
}
```

```
        if(G_no==O_no)
        {
                cout<<"\nCongrats! You Get it.";
        }

return 0;
}
```