



NUST

NATIONAL UNIVERSITY
OF SCIENCES & TECHNOLOGY

Programming lab Task

Name

Hasnain Ali

Reg. No

478806

Section

C

Lab task No:5

Lab Q.No:1

```
#include<iostream>

using namespace std;

int main()

//given while program in do while

{
int x=1;

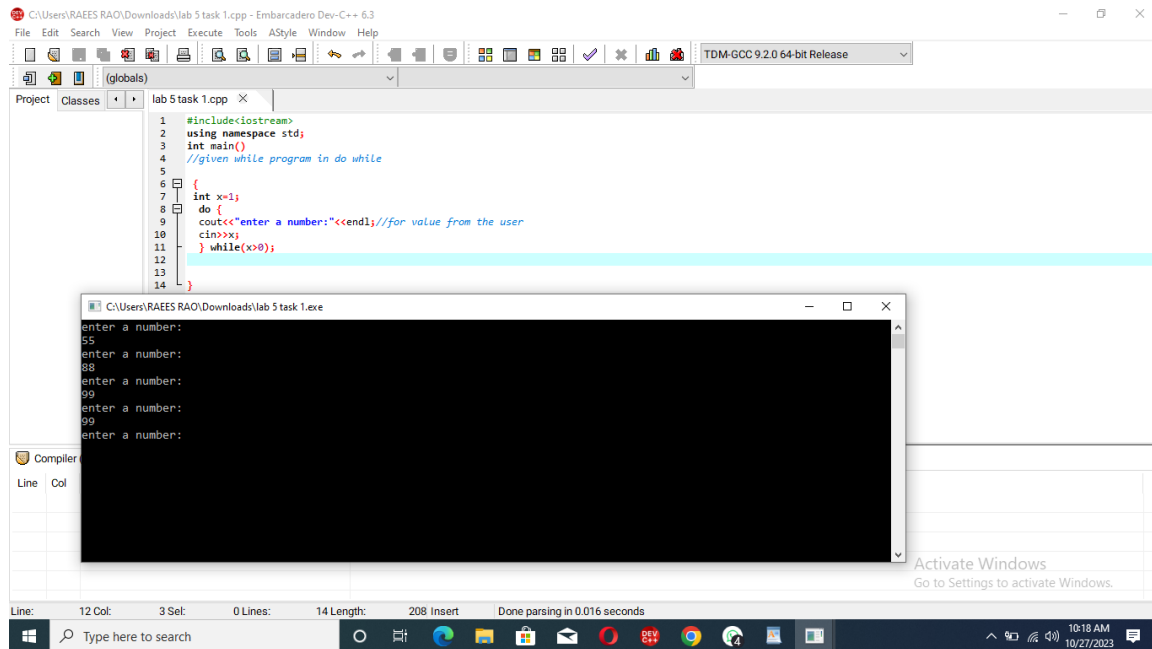
do {

cout<<"enter a number:"<<endl;//for value from the user

cin>>x;

} while(x>0);

}
```



lab Q.No:02

```
#include<iostream>

using namespace std;

//program using switch case to form calculator

//by using do while loop

int main() {

    int num1,num2;

    char operation;

    int repeat;

    do{

        cout<<"enter num1"<<endl;

        cin>>num1;
```

```
cout<<"enter num2"<<endl;

cin>>num2;

cout<<"press 'a' for addition 's' for subtraction. 'm' for multiplication and 'd' for division"<<endl;

cin>>operation;

    switch(operation){

        // made different buttons

        case 'a':

            cout<<num1+num2<<endl;

            break;

        case 's':

            cout<<num1-num2<<endl;

            break;

        case 'm':

            cout<<num1*num2<<endl;

            break;

        case 'd':

            cout<<num1/num2<<endl;

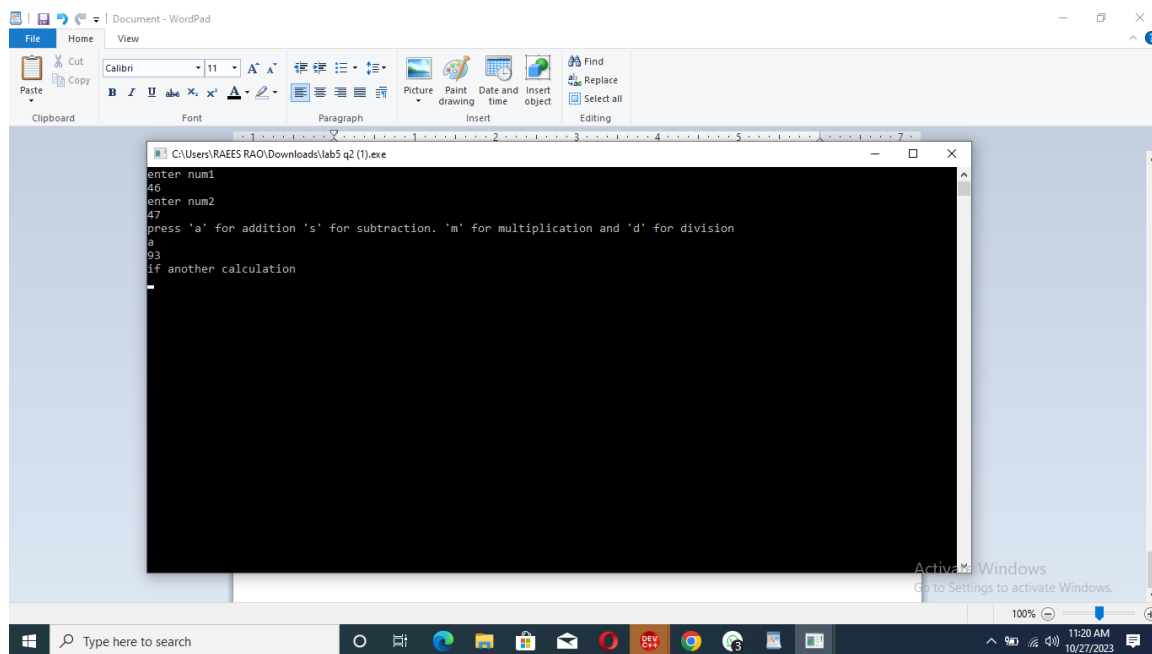
            break;}

cout<<"if another calculation"<<endl;//for another calculation

    cin>>repeat;//for repeation

} while(repeat=='Y' || repeat=='y');

}
```



Lab Q.No:04

(a)

```
#include<iostream>
```

```
#include<iomanip>
```

```
using namespace std;
```

```
int main() {
```

```
    int i;//For declaration
```

```
    int sum;
```

```
    i=3;
```

```
    sum=0;//for sum of odd numbers
```

```
while(i<100)//between 100
```

```
{
```

```
if(i%2==0){ sum=sum+i;
```

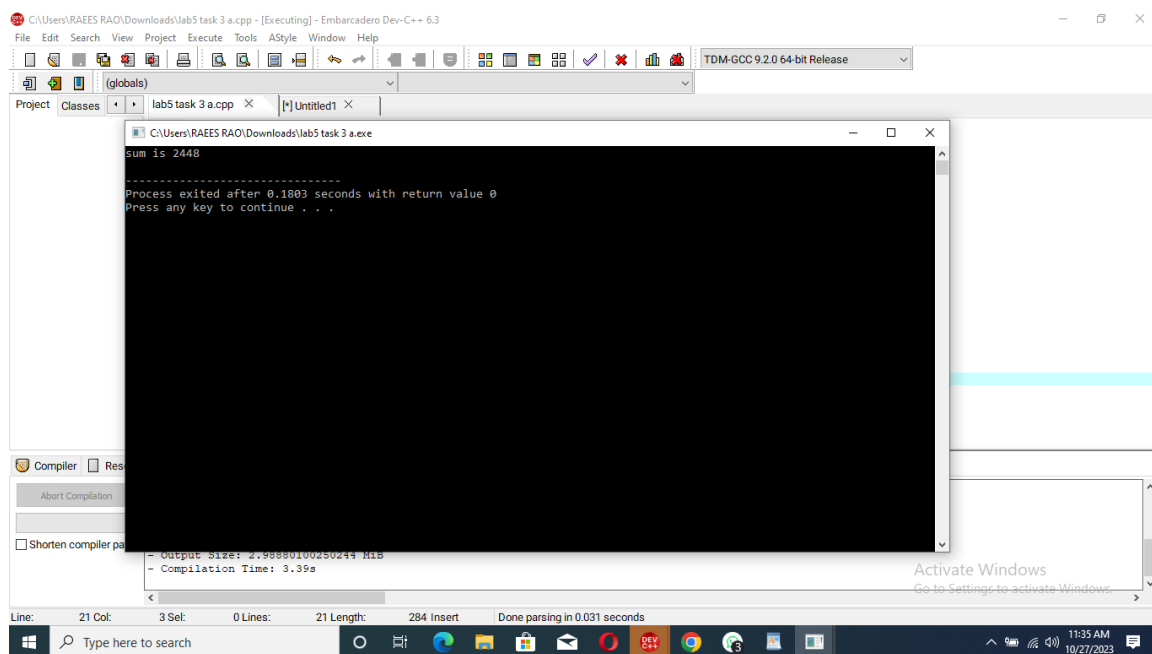
```
    } i++;
```

```
}
```

```
cout<<"sum is "<<sum<<endl;
```

```
return 0;
```

```
}
```



Q.No:3 (b)

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
{

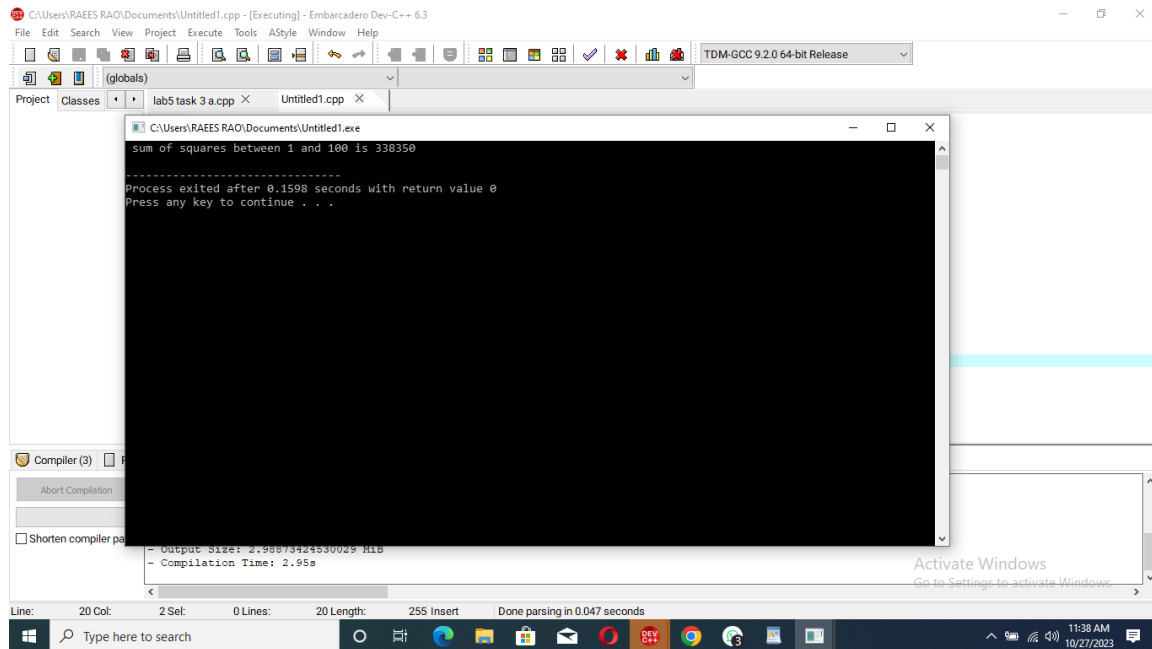
    int sum = 0;
    int i = 1;

    do {
        sum += i*i;

        i++;
    }
    while (i <= 100);

    cout << " sum of squares between 1 and 100 is " <<sum<< endl;

}
```



Lab Q.No:03(a)

```
#include <iostream>

using namespace std;
```

```
int main()
{
```

```
    int sum = 0;
```

```
    int i=2;
```

```
    do {
```

```
        sum += i;
```



```
        i += 2;
    }
    while (i <= 100);

    cout << " sum of even numbers between 2 and 100 is " << sum <<
endl;

}
```

Q.No:4a

```
#include <iostream>
```

```
#include <cmath>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int exponent = 20;
```

```
    do {
```

```
double double result = pow(2, exponent);  
cout << "2^" << exponent << " = " << result << endl;  
exponent++;  
} while (exponent <= 220);
```