Fundamentals of Programming
ME-15
Section B
1st Semester
Date of Submission: 27/10/2023
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```cpp
#include<iostream>
using namespace std;
int main(){
        int i=1;
        do{
        cout<<"Enter a number:"<<endl;
        cin>>i;
        }while(i>0);


        return 0;
}
```
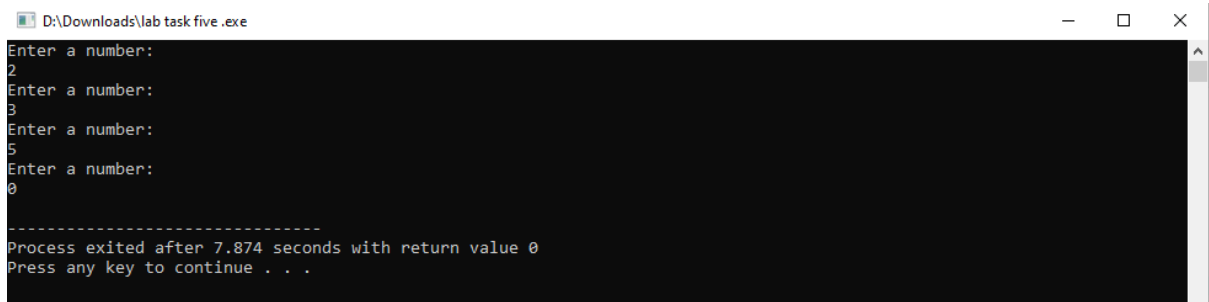


```cpp
int main(){
        int i=2, sum=0;
        while(i<=100){
        if(i % 2 == 0){
        sum+=i;}
        i++;}
        cout<<"Sum of even numbers from 2 to 100 is:"<<sum<<endl;


        return 0;
}
```
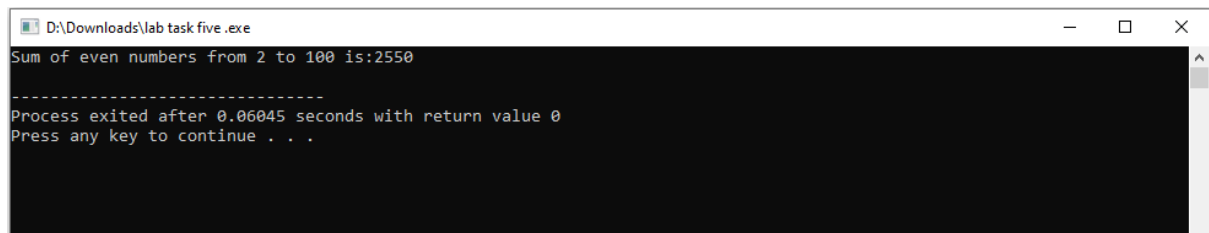
```
Sum of even numbers from 2 to 100 is:2550

--------------------------------
Process exited after 0.06045 seconds with return value 0
Press any key to continue . . .
```

```cpp
#include<cmath>

int main(){

        int i=1, sum=0;

        while(i<=100){

        sum+= i*i;

        i++;}

        cout<<"Sum of the squared numbers from 1 to 100 is:"<<sum<<endl;

        return 0;

}
```
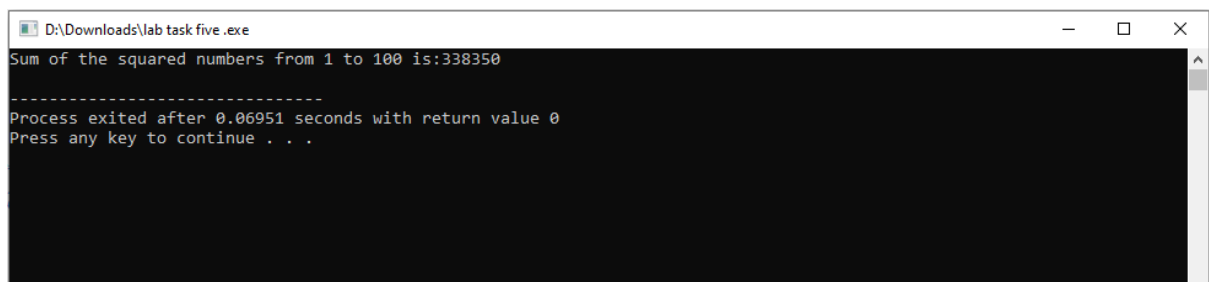
```
Sum of the squared numbers from 1 to 100 is:338350

--------------------------------
Process exited after 0.06951 seconds with return value 0
Press any key to continue . . .
```

```cpp
#include<cmath>

int main(){

        int i=0;

        while(i<=20){

        i++;

        cout<<pow(2,i)<<endl;

        }
```
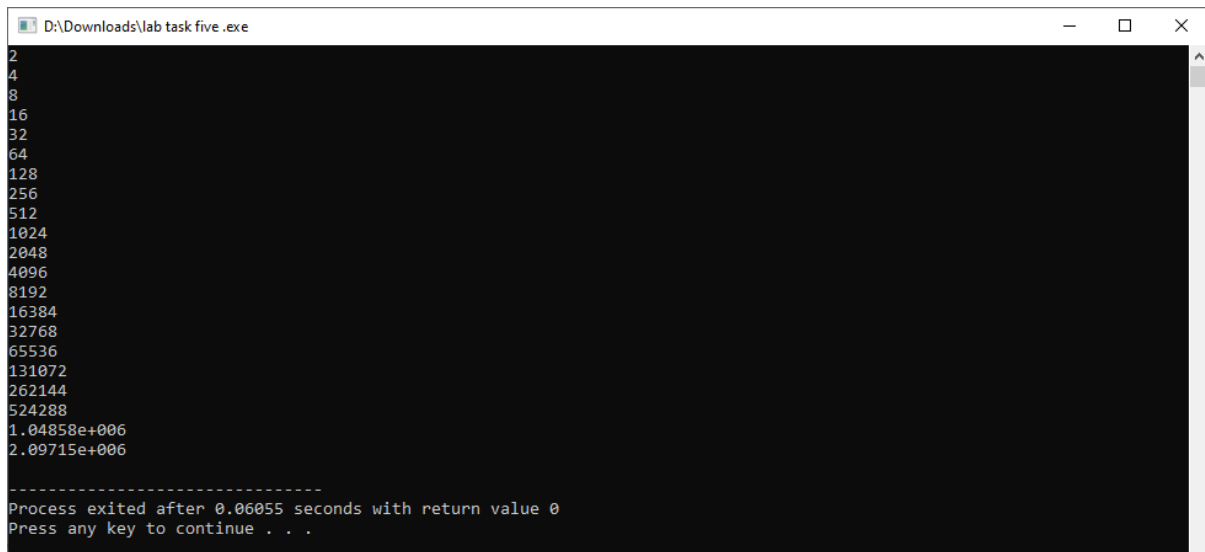
return 0;}

```
D:\Downloads\lab task five .exe                              —   □   ×
2
4
8
16
32
64
128
256
512
1024
2048
4096
8192
16384
32768
65536
131072
262144
524288
1.04858e+006
2.09715e+006

--------------------------------
Process exited after 0.06055 seconds with return value 0
Press any key to continue . . .
```

int main(){

       int a, b, sum=0;

       cout<<"Enter two numbers 'a' and 'b':"<<endl;
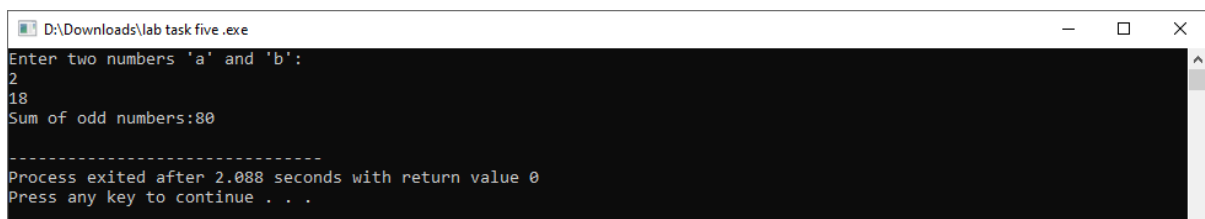
       cin>>a>>b;

       while(a<=b){

       if(a % 2 != 0){

       sum+=a;}

       a++;   //only doing 'a' increment because the numbers start from the number 'a'

       }

       cout<<"Sum of odd numbers:"<<sum<<endl;

       return 0;

}

```
D:\Downloads\lab task five .exe                              —   □   ×
Enter two numbers 'a' and 'b':
2
18
Sum of odd numbers:80

--------------------------------
Process exited after 2.088 seconds with return value 0
Press any key to continue . . .
```

```cpp
#include<cmath>

int main(){

    char symbols;

    int num1, num2, a;

    do{

    cout<<"Enter a number:"<<endl;

    cin>>num1;

    cout<<"Enter an operation:"<<endl;

    cin>>symbols;

    cout<<"Enter another number:"<<endl;

    cin>>num2;

    switch(symbols){

    case'*':

    cout<<"Answer:"<<num1*num2<<endl;   /*place the enter another number statements in
the do while group to restart the calculator.*/

    break;

    case'/':

    cout<<"Answer:"<<num1/num2<<endl;

    break;

    case'-':

    cout<<"Answer:"<<num1-num2<<endl;

    break;

    case'+':

    cout<<"Answer:"<<num1+num2<<endl;

    break;

    case'%':

    cout<<"Answer:"<<num1%num2<<endl;

    break;

    case'^':

    cout<<"Answer:"<<pow(num1,num2)<<endl;

    break;
```

```cpp
        default:

        cout<<"Invalid"<<endl;

        }

        cout<<"Enter 1 to try again, 0 to end program:"<<endl;

        cin>>a;

    } while(a == 1);

        cout<<"Program ended."<<endl;

return 0;

}
```
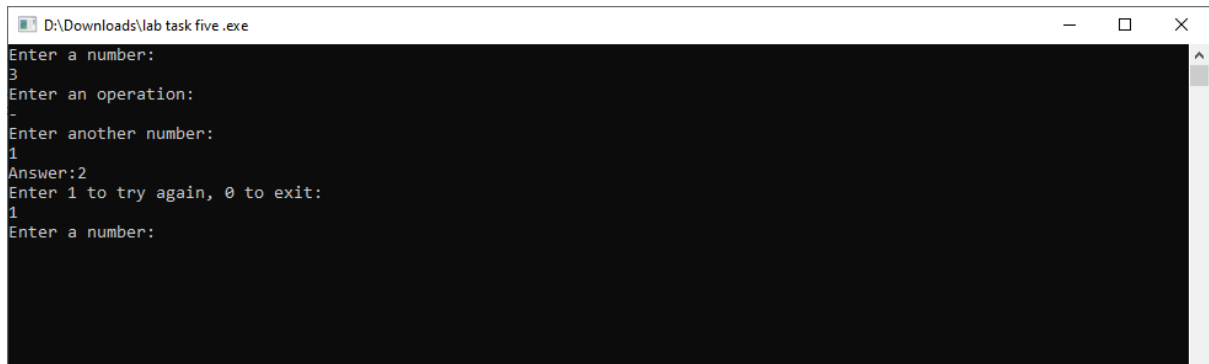


```
D:\Downloads\lab task five .exe                                    —    □    ✕

Enter a number:
3
Enter an operation:
-
Enter another number:
1
Answer:2
Enter 1 to try again, 0 to exit:
1
Enter a number:
```