

Lab Manual :4

Lab Task

Submitted to : M.Affan

Name: Nafeel Javaid

Course: ME-15

Section : A

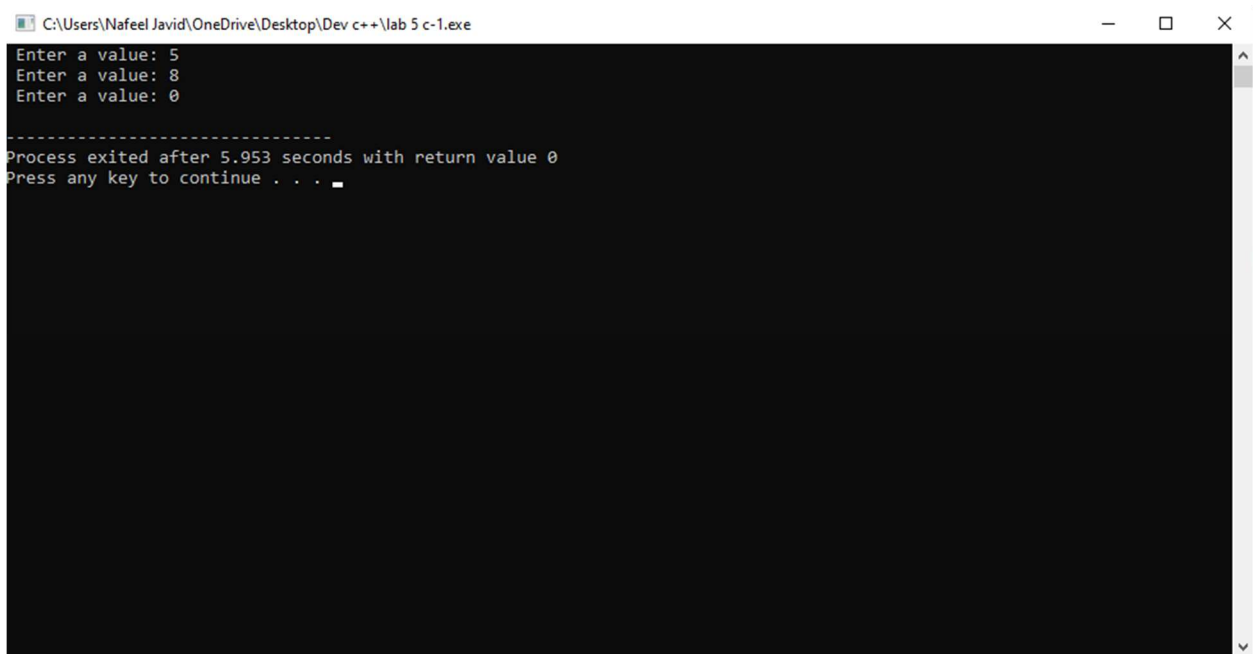
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Task 1:

```
• #include<iostream>

using namespace std;

int main(){
    int x=1;
    do {
        cout<<" Enter a value: ";
        cin>>x;
    }
    while(x>0) ;
    return 0;
}
```

A screenshot of a Windows command prompt window titled "C:\Users\Nafeel Javid\OneDrive\Desktop\Dev c++\lab 5 c-1.exe". The window has a black background with white text. It shows the output of the C++ program: "Enter a value: 5", "Enter a value: 8", and "Enter a value: 0". Below these, a separator line of dashes is shown, followed by the message "Process exited after 5.953 seconds with return value 0" and "Press any key to continue . . .". A cursor is visible at the end of the last line.

```
C:\Users\Nafeel Javid\OneDrive\Desktop\Dev c++\lab 5 c-1.exe
Enter a value: 5
Enter a value: 8
Enter a value: 0

-----
Process exited after 5.953 seconds with return value 0
Press any key to continue . . .
```

Task 2:

```
• #include<iostream>

using namespace std;

int main()
{
    double x,y,z;
    char op,ch;
    do{
        cout << " Enter first value: ";
        cin>>x;
        cout<<" Tell the operator: ";
        cin>>op;
        cout << " Enter second value: ";
        cin>>y;
        switch(op) {
            case '+':
                z=x+y;
                break;
            case '-':
                z=x-y;
                break;
            case '*':
                z=x*y;
                break;
```

```

        default:
            cout<< " Plz tell a correct operator";
            break;
    }

    cout<< " Your Result is : "<<z<<endl;
    cout<< " Want to perform again if yes then enter y ? ";
    cin>>ch;

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

    cout<<" Allah Fiz " ;

    return 0;
}

```

The screenshot shows a Windows command prompt window titled "C:\Users\Nafeel Javid\OneDrive\Desktop\Dev c++\lab 5 c- 2.exe". The program's output is as follows:

```

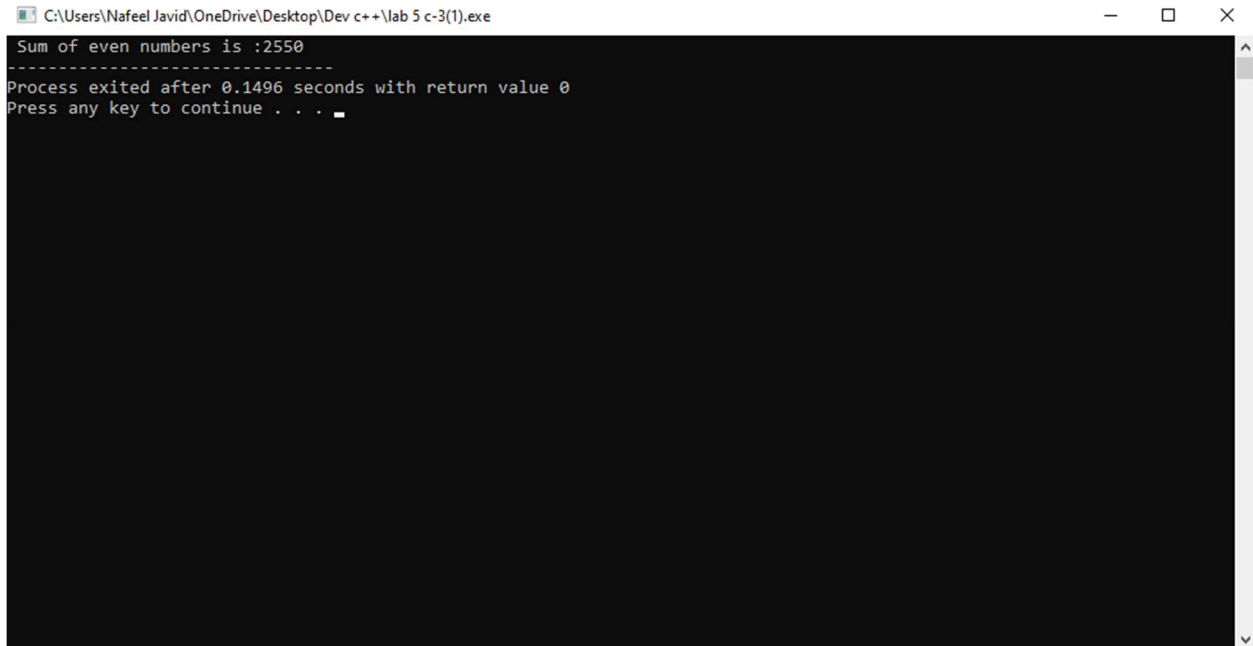
Enter first value: 8
Tell the operator: +
Enter second value: 4
Your Result is : 12
Want to perform again if yes then enter y ? y
Enter first value: 3
Tell the operator: -
Enter second value: 1
Your Result is : 2
Want to perform again if yes then enter y ? n
Allah Fiz
-----
Process exited after 20.02 seconds with return value 0
Press any key to continue . . .

```

Task 3 :

- #include<iostream>

```
using namespace std;
int main()
{
    int x=0;
    int y=2;
    while(y<=100) {
        if(y%2==0){
            x=y+x;
            y++ ;
        }
        else{
            y++;
        }
    }
    cout<<" Sum of even numbers is :"<<x;
    return 0;
}
```

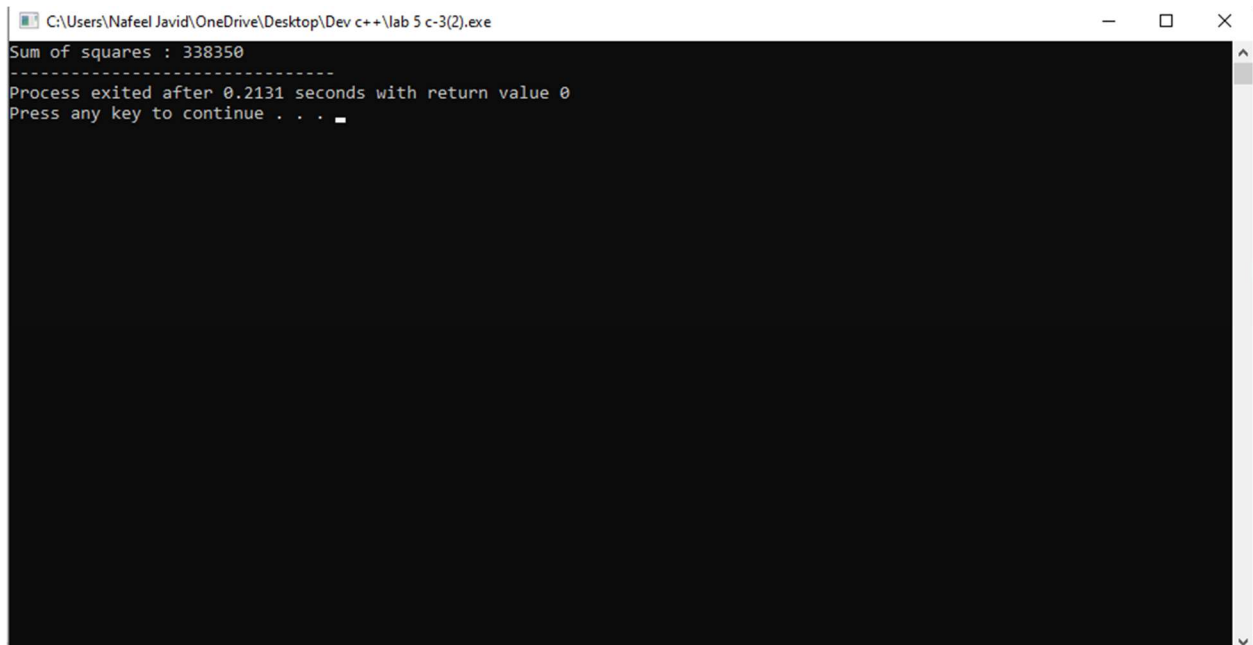


```
C:\Users\Nafeel Javid\OneDrive\Desktop\Dev c++\lab 5 c-3(1).exe
Sum of even numbers is :2550
-----
Process exited after 0.1496 seconds with return value 0
Press any key to continue . . .
```

```
• #include<iostream>

using namespace std;

int main ()
{
    int x=0;
    int y=1;
    while(y<=100) {
        x=x+(y*y) ;
        y++;
    }
    cout<< "Sum of squares : "<<x;
    return 0;
}
```



```
C:\Users\Nafeel Javid\OneDrive\Desktop\Dev c++\lab 5 c-3(2).exe
Sum of squares : 338350
-----
Process exited after 0.2131 seconds with return value 0
Press any key to continue . . .
```

Task 4 :

- `#include<iostream>`

```
#include<math.h>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int power=0;
```

```
    int z;
```

```
    while(power<=20) {
```

```
        z=pow(2,power);
```

```
        cout<<z<<endl;
```

```
        power++;
```

```
    }return 0; }
```

```
C:\Users\Nafeel Javid\OneDrive\Desktop\Dev c++\lab 5 c4-1.exe
1
2
4
8
16
32
64
128
256
512
1024
2048
4096
8192
16384
32768
65536
131072
262144
524288
1048576
-----
Process exited after 0.2721 seconds with return value 0
Press any key to continue . . .
```

- `#include<iostream>`

`using namespace std;`

`int main()`

`{`

`int a,b;`

`int z=0;`

`cout << " Enter the first value: ";`

`cin>>a;`

`cout<<" Enter second value: ";`

`cin>>b;`

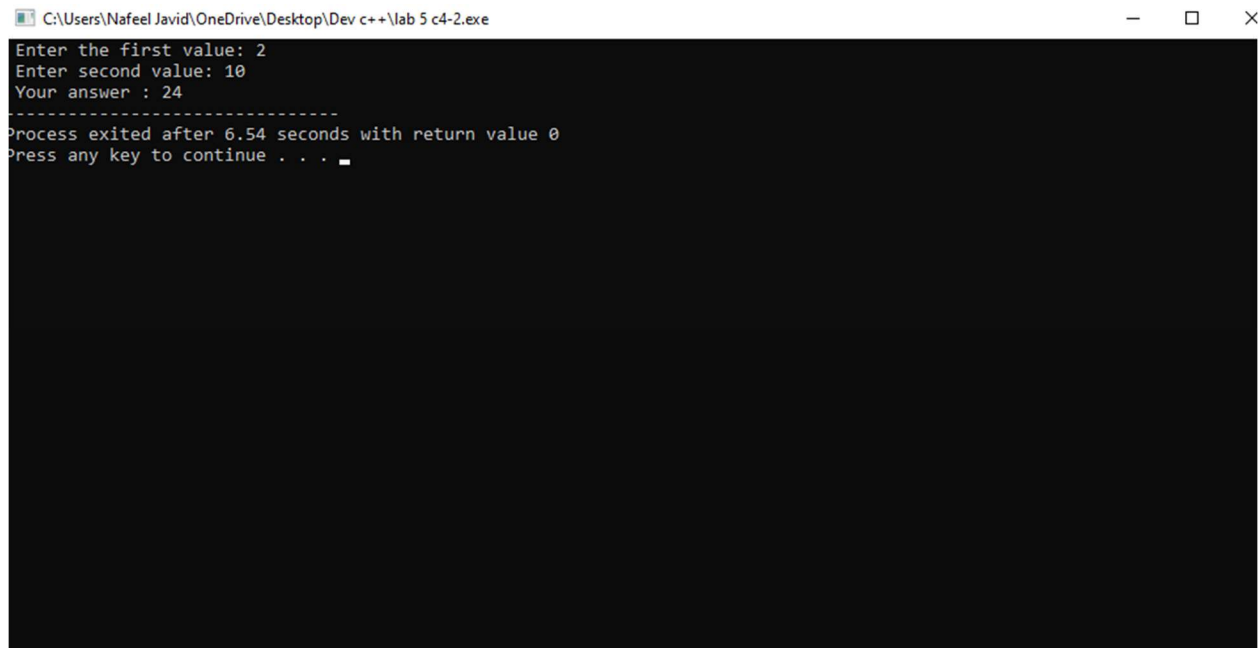
`while(a<=b) {`

`if(a%2!=0){`

`z=z+a;`

`a++;`


```
        } else{  
            a++;  
        }  
    } cout << " Your answer : "<<z;  
    return 0;  
}
```



```
C:\Users\Nafeel Javid\OneDrive\Desktop\Dev c++\lab 5 c4-2.exe  
Enter the first value: 2  
Enter second value: 10  
Your answer : 24  
-----  
Process exited after 6.54 seconds with return value 0  
Press any key to continue . . .
```