Lab Task 05

Submitted By:

Wasif Mehmood

Submitted To:

Zakira Inayat

Reg No:

PWBCS0769

Department:

CS&IT (SECTION B)

Q1. Write a C++ program which inputs two numbers from the user, and display the maximum

of them.

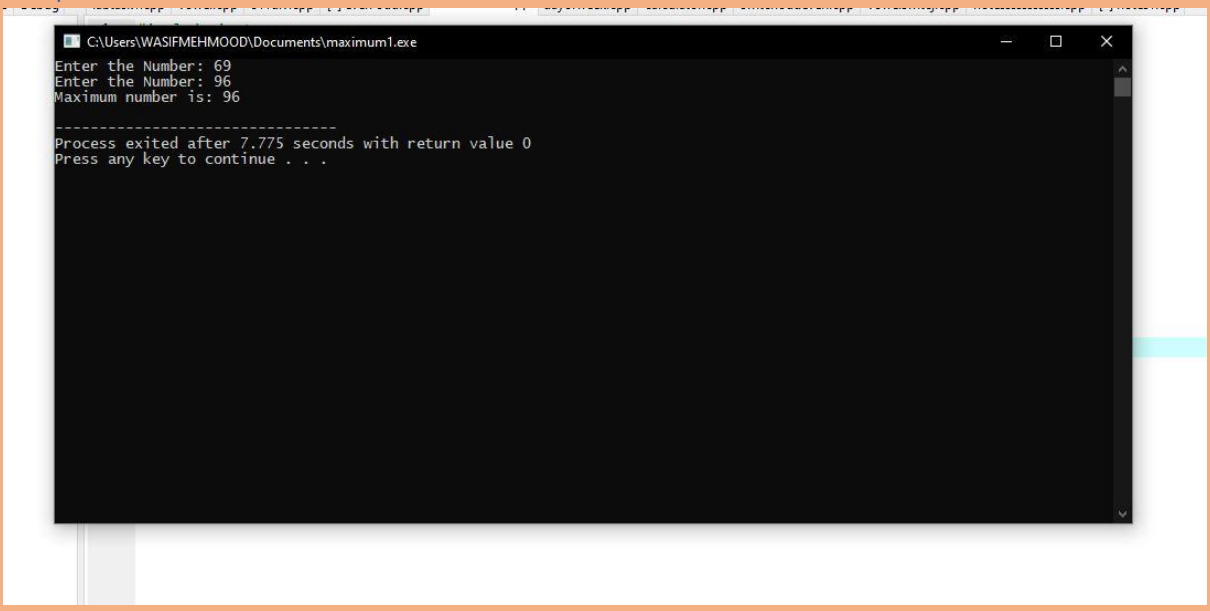
For sample output, the first number is the last two digits of your registration number,

whereas the second number is the reverse of the first number.

Source Code:

```
#include<iostream>
using namespace std;
int main()
{
	int num1,num2;
	cout<<"Enter the Number: ";
	cin>>num1;
	cout<<"Enter the Number: ";
	cin>>num2;
	if(num1>num2)
	{
		cout<<"Maximum number is: "<<num1<<endl;
	}
	else
	cout<<"Maximum number is: "<<num2<<endl;
	return 0;
}
```

Output:



Q2. Write a C++ program which inputs a number from the user, and classify it as even or odd.

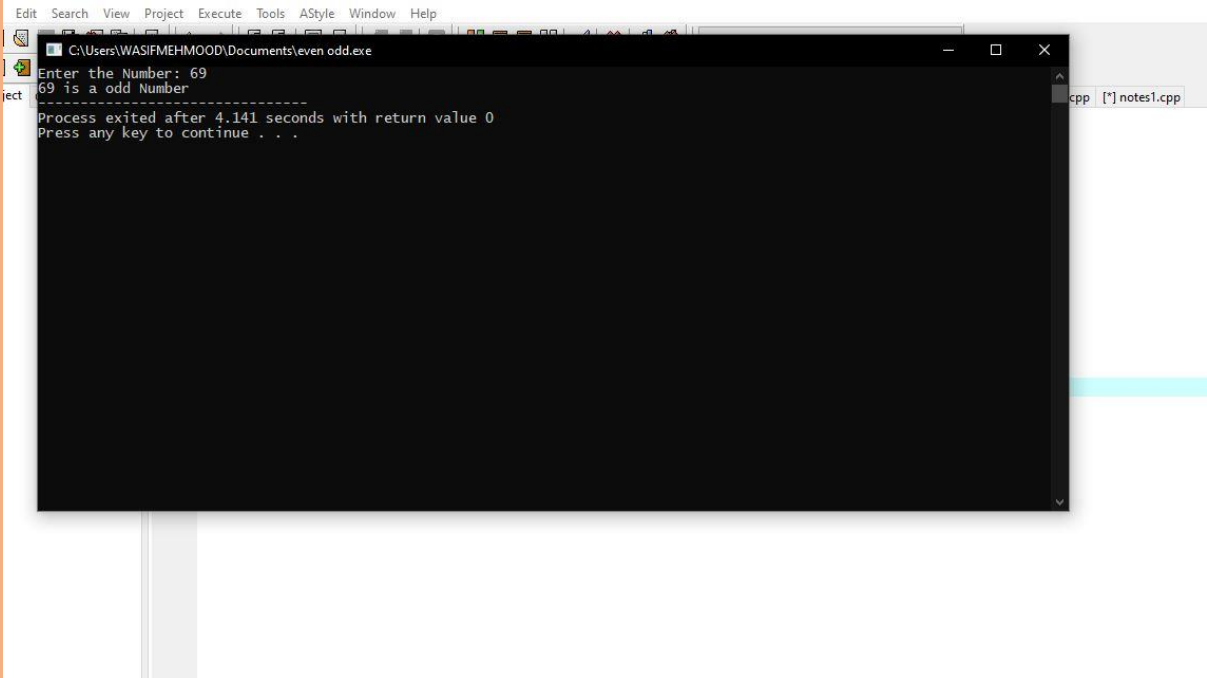
For sample output, use the last two digits of your registration number.

Source Code:

```
#include<iostream>

using namespace std;

int main()

{

	int num;

	cout<<"Enter the Number: ";

	cin>>num;

	if(num%2==0)

	{

		cout<<num<<" is an even Number";

	}

	else

	cout<<num<<" is an odd Number";

	return 0;
```

}

Output:



Q3. Write a C++ program which inputs a number and check if it is divisible by 5 and 11.

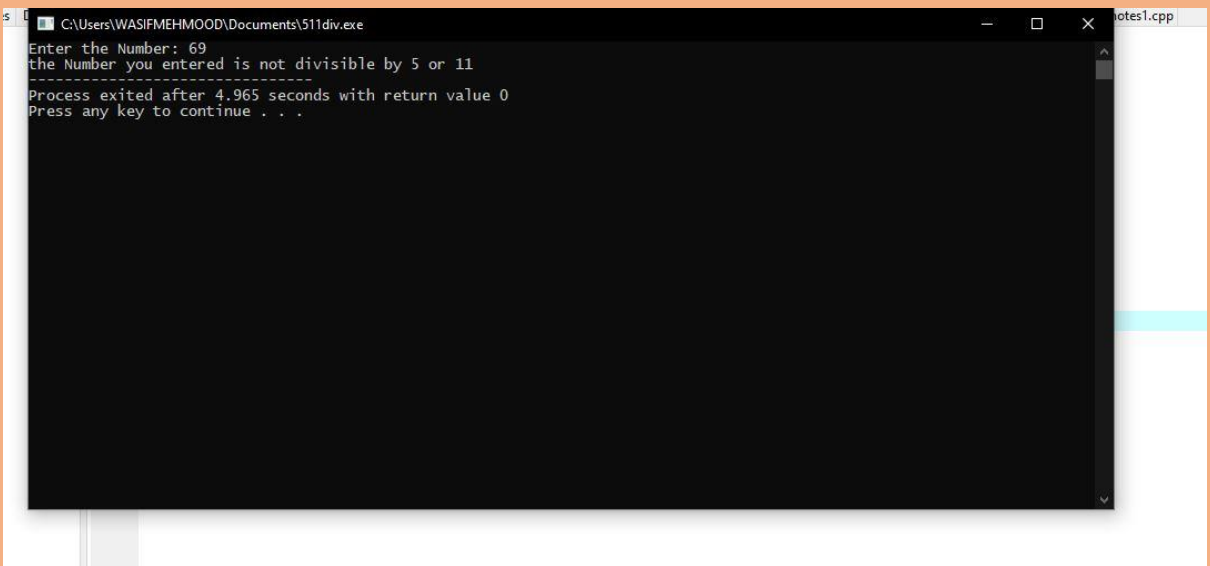
For sample output, use the last two digits of your registration number.

Source Code:

```
#include<iostream>
using namespace std;
int main()
{
	int num;
	cout<<"Enter the Number: ";
	cin>>num;
	if(num%5==0 || num%11==0)
	{
		cout<<"the Number you entered is divisible by 5 or 11";
```

```
        }
        else
        cout<<"the Number you entered is not divisible by 5 or 11";
        return 0;
}
```

Output:



Q4. Write a C++ program which inputs a character and check if it is vowel or consonant.

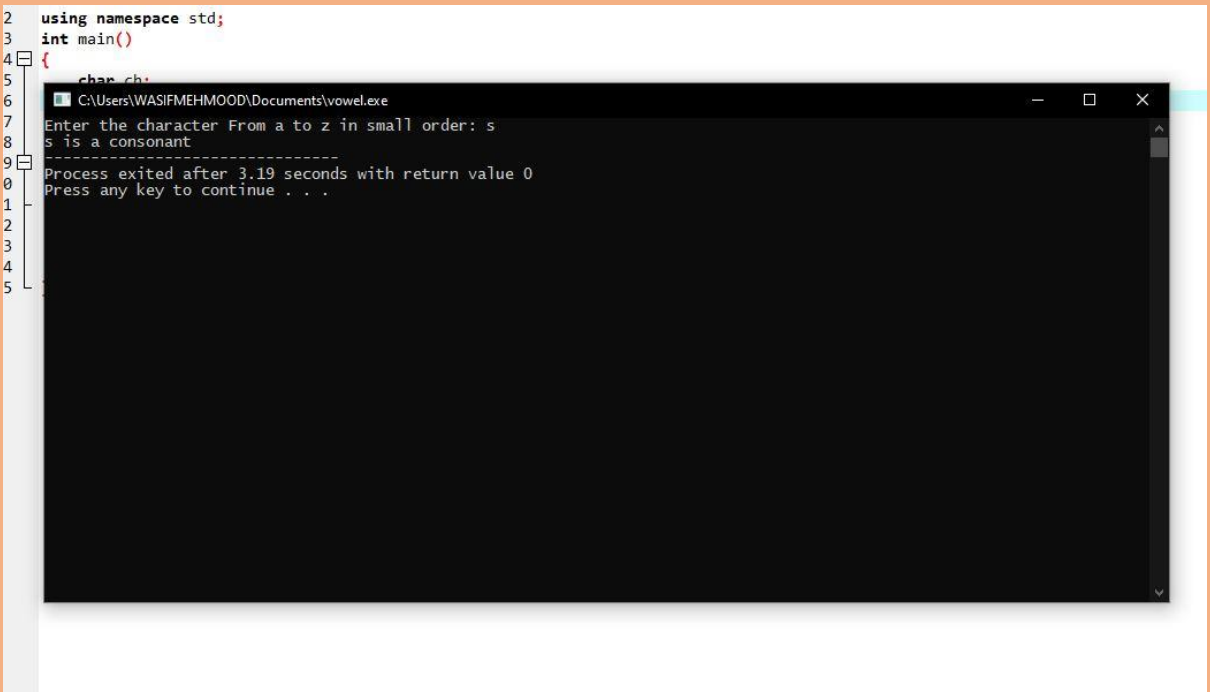
For sample input, use the 3rd letter of your name.

Source Code:

```
#include<iostream>
using namespace std;
int main()
{
        char ch;
        cout<<"Enter the character from a to z in small order";
        cin>>ch;
        if(ch=='a'|| ch=='e'|| ch=='i' || ch=='o' || ch=='u')
```

```
        {
                cout<<ch<<" is a vowel";
        }
        else
        cout<<ch<<" is a consonant";
        return 0;
}
```

Output:



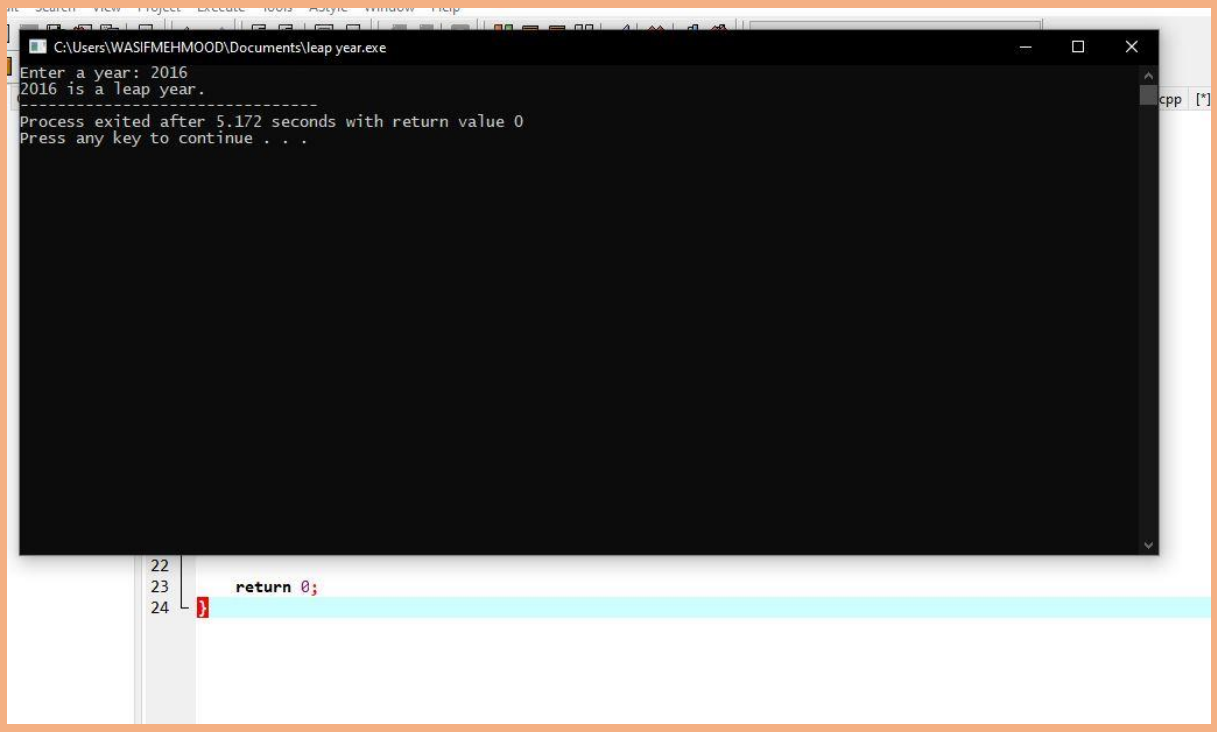
Q5. Write a C++ program which inputs a year and check if it is leap year.

Source Code:

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

int main()
{
```

```
    int year;

    cout << "Enter a year: ";
    cin >> year;

    if (year % 4 == 0) {
        if (year % 100 == 0) {
            if (year % 400 == 0)
                cout << year << " is a leap year.";
            else
                cout << year << " is not a leap year.";
        }
        else
            cout << year << " is a leap year.";
    }
    else
        cout << year << " is not a leap year.";

    return 0;
}
```

Output:



Q.6. A bank teller has money available in the form of 4 denominations of 1, 5, 50, and 100. Whenever a customer demands some amount, the teller attempts to minimize the use of notes by distributing the highest value denomination notes, followed by the lesser value notes. The objective is to minimize the minimum number of notes disbursement. For example, to disburse Rs. 319/-, the teller will provide 3 notes of 100, 0 notes of fifty, 3 notes of five, and 4 notes of one. You task is to design a computer program which will input the required amount, and will display the number of notes required for each denomination.

Source Code:

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

int main()
{
        int amt,R100,R50,R5,R1;
```

```
        cout<<"Enter amount : ";
        cin>>amt;
        R100=amt/100;
        amt=amt%100;
        R50=amt/50;
        amt=amt%50;
        R5=amt/5;
        amt=amt%5;
        R1=amt;
        cout<<"Rs.100: "<<R100<<"\nRs.50 : "<<R50<<"\nRs. 5 : "<<R5<<
                "\nRs. 1 : "<<R1;
        return 0;
}
```

Output: