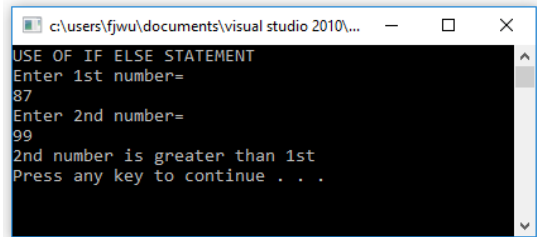
# Task-01

Run both the sample programs, note the output and get familiar with the syntax.

**Code:**

```
#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
	int a,b;
	cout<<"USE OF IF ELSE STATEMENT\n";
	cout<<"Enter 1st number= \n";
	cin>>a;
	cout<<"Enter 2nd number= \n";
	cin>>b;
	if (a>b)
	cout<<"1st number is greater than 2nd\n";
	else
		cout<<"2nd number is greater than 1st\n";
	system("pause");
	return 0;
}
```

**Output:**

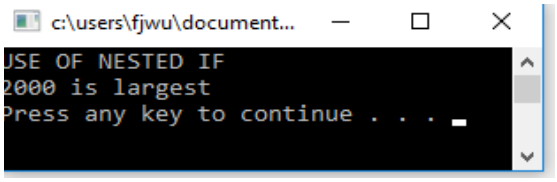



**Code:**

```
#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
	cout<<"USE OF NESTED IF\n";
	int a=100,b=2000,c=300;
	if(a>b)
	{
		if(a>c)
			cout<<a<<" is largest \n";
		else if(c>b)
```

```
                cout<<c<<" is largest \n";
        }
        else{
                if (b>c)
                        cout<<b<<" is largest"<<endl;
                else
                        cout<<c<<" is largest \n";
        }
        system("pause");
        return 0;
}
```

**Output:**



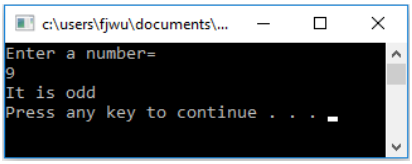

## Task-02

Write a program which take a number from the user and display weather the number is even or odd

**Code:**

```
#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
        int n;
        cout<<"Enter a number= \n";
        cin>>n;
        if(n%2==0)
                cout<<"It is even\n";
        else
                cout<<"It is odd \n";
        system ("pause");
        return 0;
}
```

**Output:**



# Task-03

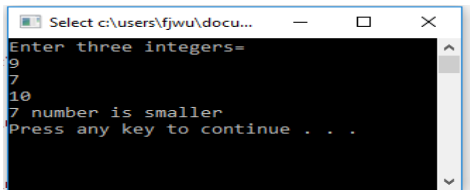
Write a C++ code which take three inputs from user, your program should display the smallest value (use nested if )

**Code:**

```
#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
	int a,b,c;
	cout<<"Enter three integers= \n";
	cin>>a>>b>>c;
	if(a<b){
		if(a<c)
			cout<<a<<" number is smallest\n";
	}
	else if(b<a){
		if(b<c)
			cout<<b<<" number is smaller\n";
	}
	else if(c<a){
		if(c<b)
			cout<<c<<" number is smaller\n";
	}


	system ("pause");
	return 0;
}
```

**Output:**




# Task-04

Write a program which take 4 unique inputs from the user and find the largest number from them. (use logical operators for multiple conditions)

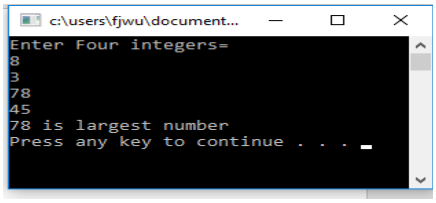
**Code:**

```
#include "stdafx.h"
#include<iostream>
```

```
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
	int a,b,c,d;
	cout<<"Enter Four integers= \n";
	cin>>a>>b>>c>>d;
	if((a>b)&&(a>c)&&(a>d))
		cout<<a<<" is largest number\n";
	else if((b>a)&&(b>c)&&(b>d))
		cout<<b<<" is largest number\n";
	else if((c>a)&&(c>b)&&(c>d))
		cout<<c<<" is largest number\n";
	else
		cout<<d<<" is lagest number\n";


	system ("pause");
	return 0;
}
```

**Output:**




## Task-05

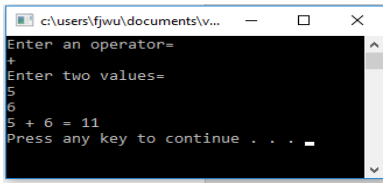
Create a calculator in C++ which can perform addition, subtraction, multiplication, division Ask the user to enter the operator first then ask the user to enter first and then second value

**Code:**

```
#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
	char o;
	int a,b;
	cout<<"Enter an operator= \n";
	cin>>o;
	cout<<"Enter two values= \n";
	cin>>a>>b;
	if(o=='+')
		cout<<a<<" + "<<b<<" = "<<a+b<<endl;
	else if(o=='-')
		cout<<a<<" - "<<b<<" = "<<a-b<<endl;
	else if(o=='*')
		cout<<a<<" * "<<b<<" = "<<a*b<<endl;
```

```
	else if(o=='/')
		cout<<a<<" / "<<b<<" = "<<a/b<<endl;
	else
		cout<<"Invalid"<<endl;
	system ("pause");
	return 0;
}
```

**Output:**



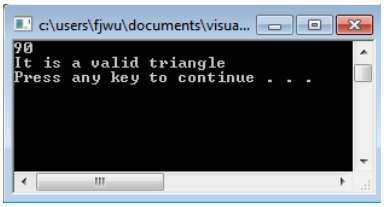

## Task-06

Write a program to check whether a triangle is valid or not. The three angles of the triangle are entered through the keyboard. A triangle is valid if the sum of all the three angles is equal to 180 degrees.

**Code:**

```
#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
	float a,b,c,add;
	cout<<"Enter three angles of triangle= \n";
	cin>>a>>b>>c;
	add=a+b+c;
	if(add==180)
		cout<<"It is a valid triangle\n";
	else
		cout<<"Invalid triangle\n";
	system ("pause");
	return 0;
}
```

**Output:**



# Task-07

A library charges a fine for every book returned late. For first 7 days late the fine is 10 PKR, for 8-14 days fine is 20PKR and for 15-31 days fine is 50PKR. If you return the book after 31 days your membership will be cancelled. Write a program to accept the number of days from the user and display the fine message or the appropriate message.

## Code:

```
#include "stdafx.h"
#include<iostream>
using namespace std;
int _tmain(int argc, _TCHAR* argv[])
{
	int d;
	cout<<"How many days after the due date are you returning the book?\n";
	cin>>d;
	if((d>=1)&&(d<=7))
		cout<<"You have to pay a fine of 10 PKR\n";
	else if((d>=8)&&(d<=14))
		cout<<"You have to pay a fine of 20 PKR\n";
	else if((d>=15)&&(d<=31))
		cout<<"You have to pay a fine of 50 PKR\n";
	else if(d>31)
		cout<<"Your membership is cancelled.\n";
	else
		cout<<"Thank you\n";
	system ("pause");
	return 0;
}
```

## Output: