Solution for H.W Lecture 4 part 3

Q1\ Write a program that finds basic operations (addition, subtraction, multiplication, division) for two numbers entered by the user using the constructor function.

```
#include<iostream>

using namespace std;
class operations

{

float a,b,c; int

public:

operations( );

void result( );

};

operations::operations( )

{

cout<<"Mathematical Operations \n";

cout<<" 1- Addition \n";

cout<<" 2- Subtraction \n";

cout<<" 3- Multiplication \n";

cout<<" 4- Division \n";

cout<<" Please Enter Tow Values a and b \n";
```

```
cin>>a>>b;
}
void operations::result( )
{
c=a+b;
cout<<a<<"+"<<b<<"="<<c<<"\n";
c=a-b;
cout<<a<<"-"<<b<<"="<<c<<"\n";
c=a*b;
cout<<a<<"*"<<b<<"="<<c<<"\n";
if(b!=0)
{
c=a/b;
cout<<a<<"/"<<b<<"="<<c<<"\n";
}
else
cout<<"the result of division is infinite \n";
}
int main( )
{
operations op;
```

```
op.result( );

return 0;

}
```

Q2\ write c++ program to create class called (counter)

Private:

1-count of integer type

Public:

1. **Constructor to initialize count to zero.**
2. **Void inc_count ().**
3. **Void get_count ().**

In main program:

1-create two object of type counter.

```
#include <iostream>

using namespace std;

class Counter

{

private:

int count; //count

public:

Counter (): count (0)        //constructor
```

```
{ /*empty body*/ }
void inc_count()          //increment count
{
count++;
 }
int get_count()              // return count
{
return count;
 }
};
main()
{
Counter c1, c2;                              //define and initialize
cout << "\nc1=" << c1.get_count();    //display
cout << "\nc2=" << c2.get_count();
c1.inc_count();                          //increment c1
c2.inc_count();                           //increment c2
c2.inc_count();                           //increment c2
cout << "\nc1=" << c1.get_count(); //display again
cout << "\nc2=" << c2.get_count(); cout << endl;
}
```