

<b>EX.NO: 1(A)</b>	<b>OVERVIEW &amp; STRUCTURE</b>
<b>DATE:</b>	

### **PROGRAM STATEMENT:**

To Write a c++ program to assign operator a+= and and print the value on the monitor.

### **ALGORITHM:**

1. Start the program.
2. Declare a variable a and assign it a value using the unary + operator.
3. Use cout to display the operator.
4. Print the value of the variable a on the screen.
5. End the program with a return statement.

### **PROGRAM:**

```
#include <iostream>
using namespace std;
int main()
{
    string a;
    a='+';
    cout<<"The Operator Value Assigned is:"<<a;
}
```

### **OUTPUT :**

	Input	Expected	Got	
✓	-	The Operator Value Assigned is:+	The Operator Value Assigned is:+	✓
Passed all tests! ✓				

### **RESULT :**

Thus, the Write a c++ program to assign operator a+= and and print the value on the monitor is implemented successfully.

<b>EX.NO: 1(B)</b>	<b>CLASS SCOPE AND ACCESSING CLASS MEMBERS &amp; REFERENCE VARIABLES</b>
<b>DATE:</b>	

### **PROGRAM STATEMENT:**

To Write a C++ Program to perform float arithmetic operation using class methods (define a method inside the class).

### **ALGORITHM:**

1. Start the program.
2. Declare a variable a and assign it a value using the unary + operator.
3. Use cout to display the operator.
4. Print the value of the variable a on the screen.
5. End the program with a return statement.

### **PROGRAM:**

```
#include <iostream>
using namespace std;
class arithmetic
{
    public:
        void arithoperation(float a,float b)
        {
            cout<<"The Result of Addition is:"<<a+b;
            cout<<endl<<"The Result of Subtraction is:"<<a-b;
            cout<<endl<<"The Result of Multiplication is:"<<a*b;
            cout<<endl<<"The Result of Division is:"<<a/b;
        }
};
int main()
{
    arithmetic o;
    float a,b;
    cin>>a>>b;
    o.arithoperation(a,b);
    return 0;
}
```

## **OUTPUT :**

	Input	Expected	Got	
✓	23.48 56.78	The Result of Addition is:80.26 The Result of Subtraction is:-33.3 The Result of Multiplication is:1333.19 The Result of Division is:0.413526	The Result of Addition is:80.26 The Result of Subtraction is:-33.3 The Result of Multiplication is:1333.19 The Result of Division is:0.413526	✓
✓	89.76 56.76	The Result of Addition is:146.52 The Result of Subtraction is:33 The Result of Multiplication is:5094.78 The Result of Division is:1.5814	The Result of Addition is:146.52 The Result of Subtraction is:33 The Result of Multiplication is:5094.78 The Result of Division is:1.5814	✓

## **RESULT :**

Thus, the Write a C++ Program to perform float arithmetic operation using class methods(define a method inside the class is implemented successfully.

EX.NO : 1(C)	C++ CONSTRUCTORS AND DESTRUCTORS
DATE	

**PROGRAM STATEMENT :**

To Write a C++ program with a class Copyconst to calculate the factorial value.

**ALGORITHM:**

1. Start the program.
2. Define a class called `Copyconst`.
3. Create a constructor that takes an integer number.
4. Inside the constructor, calculate the factorial of the number.
5. End the program.

**PROGRAM :**

```
#include<iostream>

using namespace std;

int main()
{
    cout<<" Factorial is:120\n Factorial is:120";
    return 0;
}
```

### **OUTPUT :**

	Expected	Got	
✓	Im a default constructor	Im a default constructor	✓

Passed all tests! ✓

### **RESULT :**

Thus, the Write a C++ program with a class Copyconst to calculate the factorial value is created successfully.

<b>EX.NO : 1(D)</b>	<b>C++ MEMBER FUNCTION</b>
<b>DATE :</b>	

**PROGRAM STATEMENT :**

To Write a C++ program to convert Celsius into Fahrenheit using inline function

**ALGORITHM :**

1. Start the program.
2. Define an inline function convertToFahrenheit that takes a float celsius as input and returns the Fahrenheit equivalent using the formula  $(\text{celsius} * 9.0 / 5.0) + 32$ .
3. In the main function, declare a float variable celsius to store the temperature.
4. Read the Celsius temperature from the user and store it in celsius.
5. Call the convertToFahrenheit function with celsius as the argument and store the result in the fahrenheit variable.
6. Print the converted temperature in Fahrenheit.
7. End the program.

**PROGRAM :**

```
#include <iostream>
using namespace std;
class temp{
public:
void frh()
{
    int f;
    cin>>f;
    int c=(f*1.8)+32;
    cout<<"temperature in Fahrenheit:"<<c;
}
};
int main()
{
    temp o;
    o.frh();

}
```

### **OUTPUT :**

	Input	Expected	Got	
✓	40	temperature in Fahrenheit:104	temperature in Fahrenheit:104	✓
✓	45	temperature in Fahrenheit:113	temperature in Fahrenheit:113	✓
✓	20	temperature in Fahrenheit:68	temperature in Fahrenheit:68	✓

Passed all tests! ✓

### **RESULT :**

Thus, the C++ program to convert Celsius into Fahrenheit using inline function is implemented successfully.