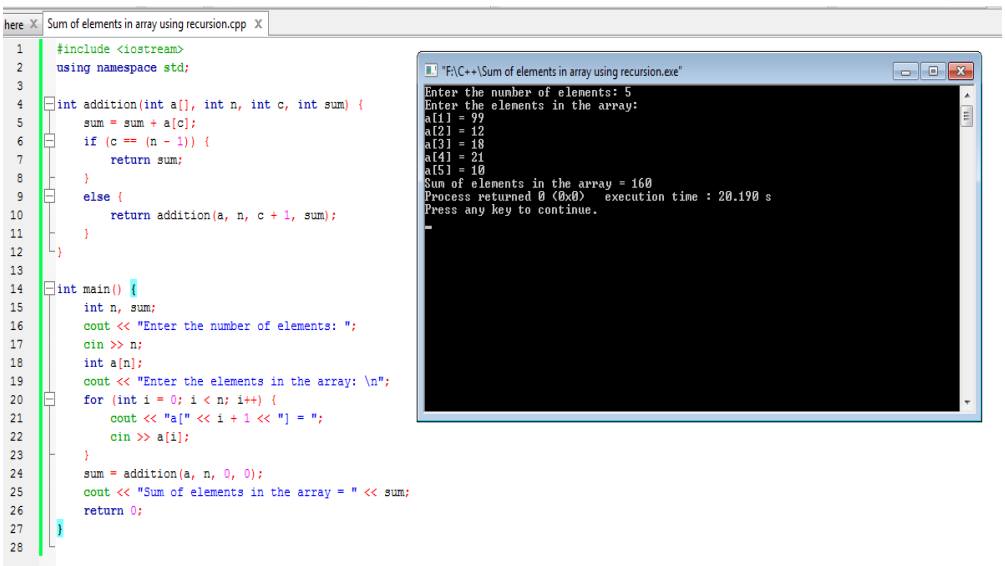
Assignment : 4

Q1) Write a code for addition of elements in the array.

Ans.

```
#include <iostream>
using namespace std;
int addition(int a[], int n, int c, int sum) {
   sum = sum + a[c];
   if (c == (n - 1)) {
      return sum;
   }
   else {
      return addition(a, n, c + 1, sum);
   }
}
int main() {
   int n, sum;
   cout << "Enter the number of elements: ";
   cin >> n;
   int a[n];
   cout << "Enter the elements in the array: \n";
   for (int i = 0; i < n; i++) {
      cout << "a[" << i + 1 << "] = ";
      cin >> a[i];
   }
   sum = addition(a, n, 0, 0);
   cout << "Sum of elements in the array = " << sum;
   return 0;
}
```

Output :



Q2) WAP to perform math operation (+ - * /) using Inline function

Ans

```
#include <iostream>
using namespace std;
inline float calculator(float a, float b, char op) {
   switch (op) {
      case '+':
         return a + b;
      case '-':
         return a - b;
      case '*':
         return a * b;
      case '/':
         if (b != 0) {
            return a / b;
         } else {
            cout << "Division by zero is not possible" << endl;
            return 0;
         }
      default:
         cout << "Invalid operation" << endl;
         return 0;
   }
}
int main() {
   float a, b;
   char op;
   cout << "Enter the first number: ";
   cin >> a;
   cout << "Enter the second number: ";
   cin >> b;
   cout << "Enter the operation (+, -, *, /): ";
   cin >> op;
   float result = calculator(a, b, op);
   cout << "Result: " << result << endl;
   return 0;
}
```

Output :

here X | WAP to perform math operationusing Inline function.cpp X

```cpp
#include <iostream>
using namespace std;
inline float calculator(float a, float b, char op) {
    switch (op) {
        case '+':
            return a + b;
        case '-':
            return a - b;
        case '*':
            return a * b;
        case '/':
            if (b != 0) {
                return a / b;
            } else {
                cout << "Division by zero is not possible" << endl;
                return 0;
            }
        default:
            cout << "Invalid operation" << endl;
            return 0;
    }
}
int main() {
    float a, b;
    char op;
    cout << "Enter the first number: ";
    cin >> a;
    cout << "Enter the second number: ";
    cin >> b;
    cout << "Enter the operation (+, -, *, /): ";
    cin >> op;
```