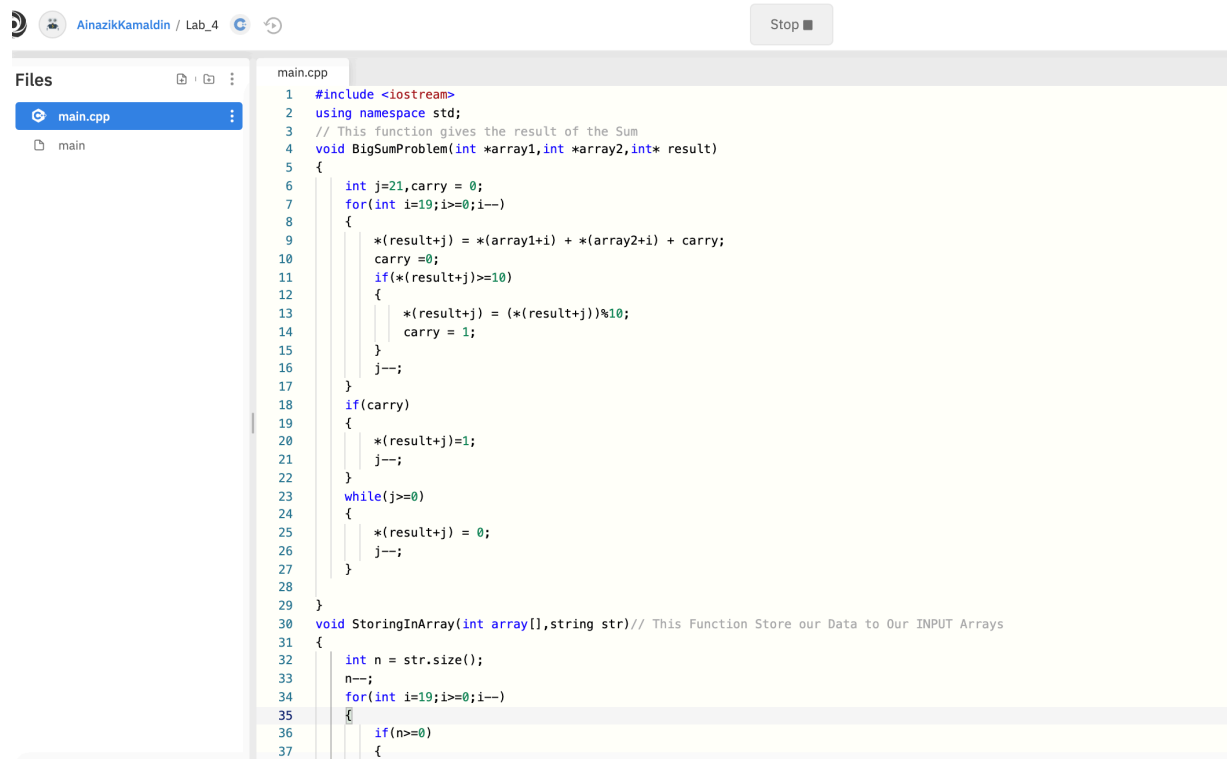


Name: **Ainazik**

Last name: **Kamaldinova**

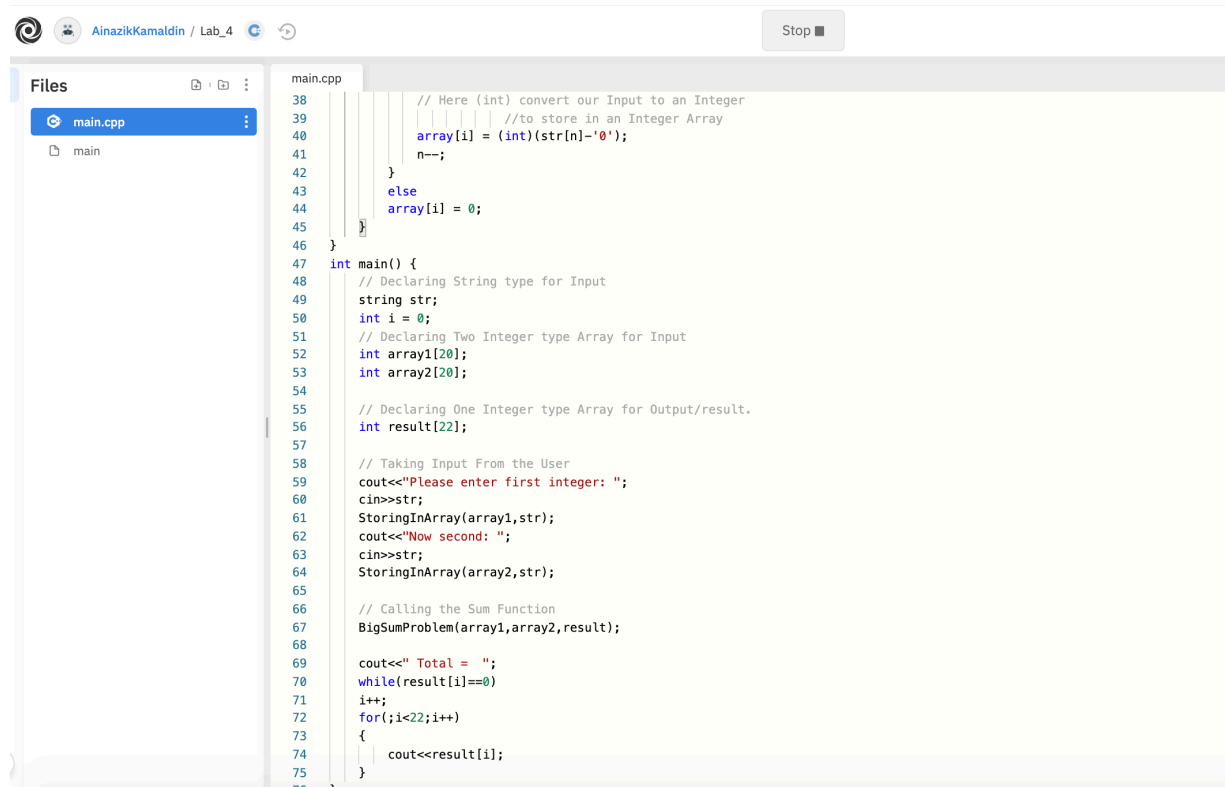
Systems_Programming: **Lab_4**

Question 1)



The screenshot shows a C++ IDE with a file named `main.cpp`. The code implements a function `BigSumProblem` that adds two large numbers represented as arrays. It uses a carry variable and loops to process each digit. A `StoringInArray` function is also shown, which stores input data into arrays.

```
1 #include <iostream>
2 using namespace std;
3 // This function gives the result of the Sum
4 void BigSumProblem(int *array1, int *array2, int* result)
5 {
6     int j=21, carry = 0;
7     for(int i=19; i>=0; i--)
8     {
9         *(result+j) = *(array1+i) + *(array2+i) + carry;
10        carry = 0;
11        if(*(result+j)>=10)
12        {
13            *(result+j) = (*(result+j))%10;
14            carry = 1;
15        }
16        j--;
17    }
18    if(carry)
19    {
20        *(result+j)=1;
21        j--;
22    }
23    while(j>=0)
24    {
25        *(result+j) = 0;
26        j--;
27    }
28 }
29
30 void StoringInArray(int array[], string str) // This Function Store our Data to Our INPUT Arrays
31 {
32     int n = str.size();
33     n--;
34     for(int i=19; i>=0; i--)
35     {
36         if(n>=0)
37         {
```






```
38 // Here (int) convert our Input to an Integer
39 //to store in an Integer Array
40 array[i] = (int)(str[n] - '0');
41 n--;
42 }
43 else
44 array[i] = 0;
45 }
46 }
47 int main() {
48 // Declaring String type for Input
49 string str;
50 int i = 0;
51 // Declaring Two Integer type Array for Input
52 int array1[20];
53 int array2[20];
54
55 // Declaring One Integer type Array for Output/result.
56 int result[22];
57
58 // Taking Input From the User
59 cout<<"Please enter first integer: ";
60 cin>>str;
61 StoringInArray(array1,str);
62 cout<<"Now second: ";
63 cin>>str;
64 StoringInArray(array2,str);
65
66 // Calling the Sum Function
67 BigSumProblem(array1,array2,result);
68
69 cout<<" Total = ";
70 while(result[i]!=0)
71 i++;
72 for(;i<22;i++)
73 {
74 | cout<<result[i];
75 }
76 }
```

Output 1:

```
> clang++-7 -pthread -std=c++17 -o main main.cpp
> ./main
Please enter first integer: 234567483902847
Now second: 5748390284735637482390
Total = 48390519303121385237> $
```

Question 2)

 AinazikKamaldin / Lab_4_2  

Run ▶

Files

main.cppmain

main.cpp

```
1  #include <bits/stdc++.h>
2  using namespace std;
3
4
5  void func(string s,string find,string replace)
6  {
7      vector<string> v;
8      int i;
9      string temp="";
10     for(i=0;i<s.length();i++)
11     {
12         if(s[i]!=' ')
13         { v.push_back(temp);
14           temp="";
15         }
16     else
17         temp+=s[i];
18     }
19     v.push_back(temp);
20     for(i=0;i<v.size();i++)
21     {
22         if(v[i].compare(find)==0)
23         {
24             cout<<replace<<" ";
25         }
26         else
27             cout<<v[i]<<" ";
28     }
```

Output 2:

```
❏ clang++-7 -pthread -std=c++17 -o main main.cpp
❏ ./main
A quick brown fox jumps over the lazy dog
fox
tiger
A quick brown tiger jumps over the lazy dog ❏
```