Assignment

AICT 1(O)

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- **Text form of the code:-**

```
#include <iostream>
using namespace std;

float calculateAverage(float matric_per, float fsc_per) {
   return (matric_per + fsc_per) / 2.0;
}

void checkEligibilityAndSeats(float avg, int seats, string pref1, string pref2, string pref3) {
   if (avg >= 60 && seats > 0) {
      cout << "So you are eligible for the "<<pref1 << endl;
      cout << "Also seats are available in the 1st Preference" << endl;
   }
   else if (avg >= 55 && seats > 0) {
      cout << "SO you are eligible for "<<pref2 << endl;
      cout << "Also seats are available in the 2nd Preference" << endl;
   }
   else if (avg >= 50 && seats > 0) {
      cout << " SO you are eligible for the "<<pref3 << endl;
      cout << "Also seats are available in the 3rd Preference" << endl;
   }
   else if (seats <= 0 && avg >= 50) {
      cout << "Sorry, no seats available." << endl;
   }
   else {
      cout << "You are not eligible for any preference." << endl;
   }
}

int main() {
   string name, phone, address, pref1, pref2, pref3;
   int age = 0, seats = 50;
   float matric_per = 0.0, fsc_per = 0.0;
   float avg;

   cout << "Enter your Name: ";
   cin >> name;

   cout << "Enter your Age: ";
   cin >> age;
   if (age < 0) {
      cout << "Please enter a valid age." << endl;
      return 0;
   }

   cout << "Enter your Phone: ";
   cin >> phone;

   cout << "Enter your Address: ";
   cin >> address;

   cout << "Enter your Matric percentage: ";
   cin >> matric_per;
   if (matric_per < 0 || matric_per > 100) {
```

```
    cout << "Please enter a valid percentage." << endl;
    return 0;
}

cout << "Enter your Inter percentage: ";
cin >> fsc_per;
if (fsc_per < 0 || fsc_per > 100) {
    cout << "Please enter a valid percentage." << endl;
    return 0;
}

cout << "Enter your First Preference (60 -100)% ";
cin >> pref1;

cout << "Enter your Second Preference (55-60)% : ";
cin >> pref2;

cout << "Enter your Third Preference (50-55)% : ";
cin >> pref3;

avg = calculateAverage(matric_per, fsc_per);
cout << "Your average is = " << avg << endl;

checkEligibilityAndSeats(avg, seats, pref1, pref2, pref3);

return 0;
        }
```

- **Code with Functions:-**

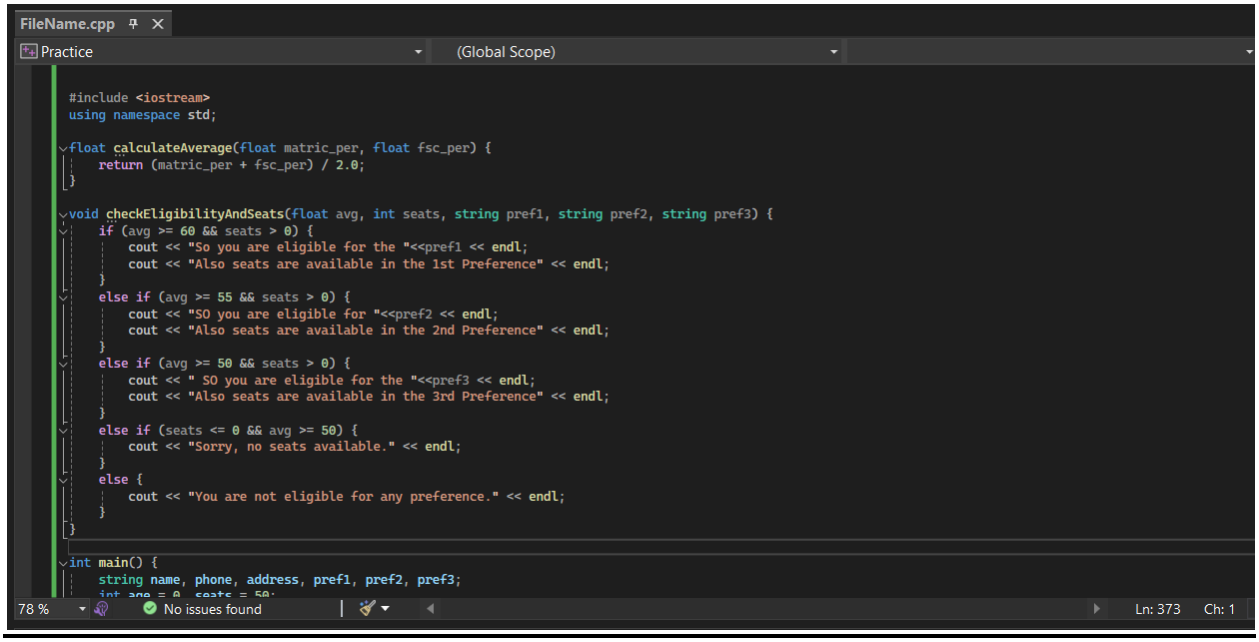

Fig 1.1 shows that Eligibility criteria for admission

- **User details:-**

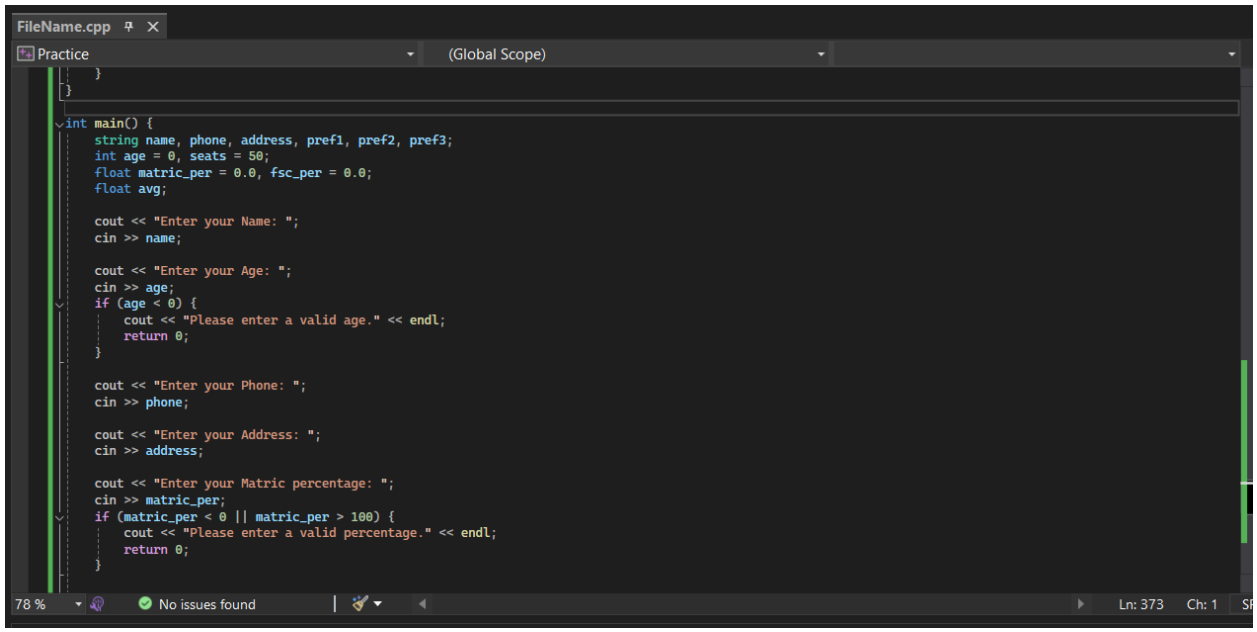

Figure 1.2 shows that the User details

- **Check seats and Average:-**

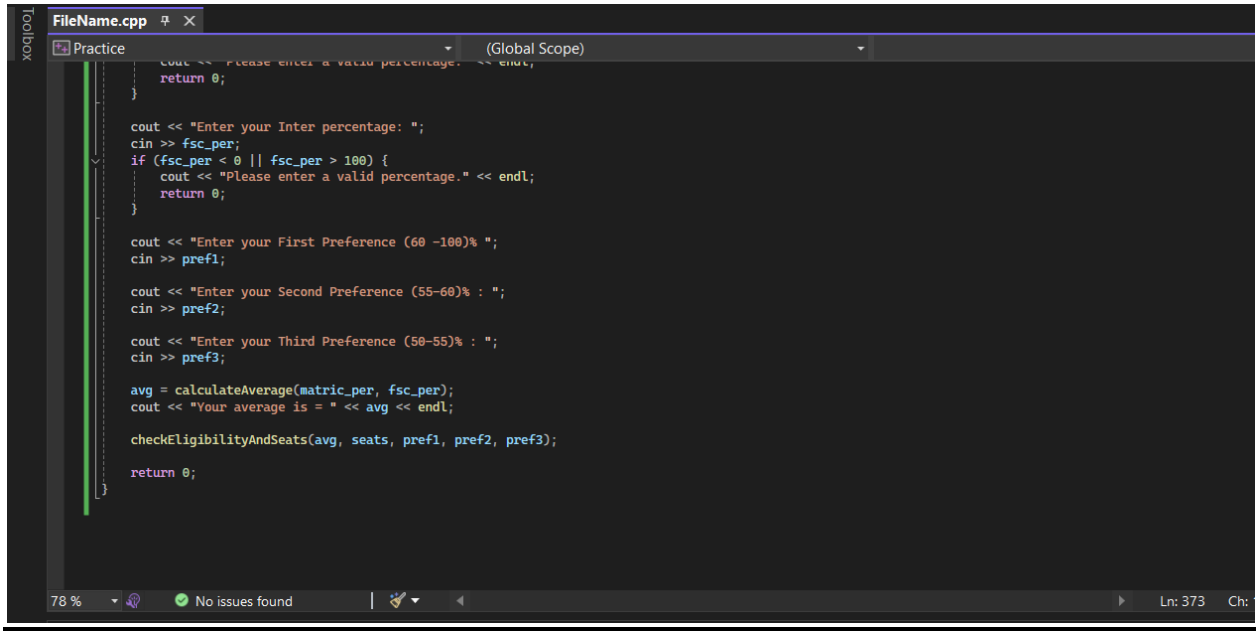

Figure 1.3 shows that we check seats and average

- **Compilation of the code:-**

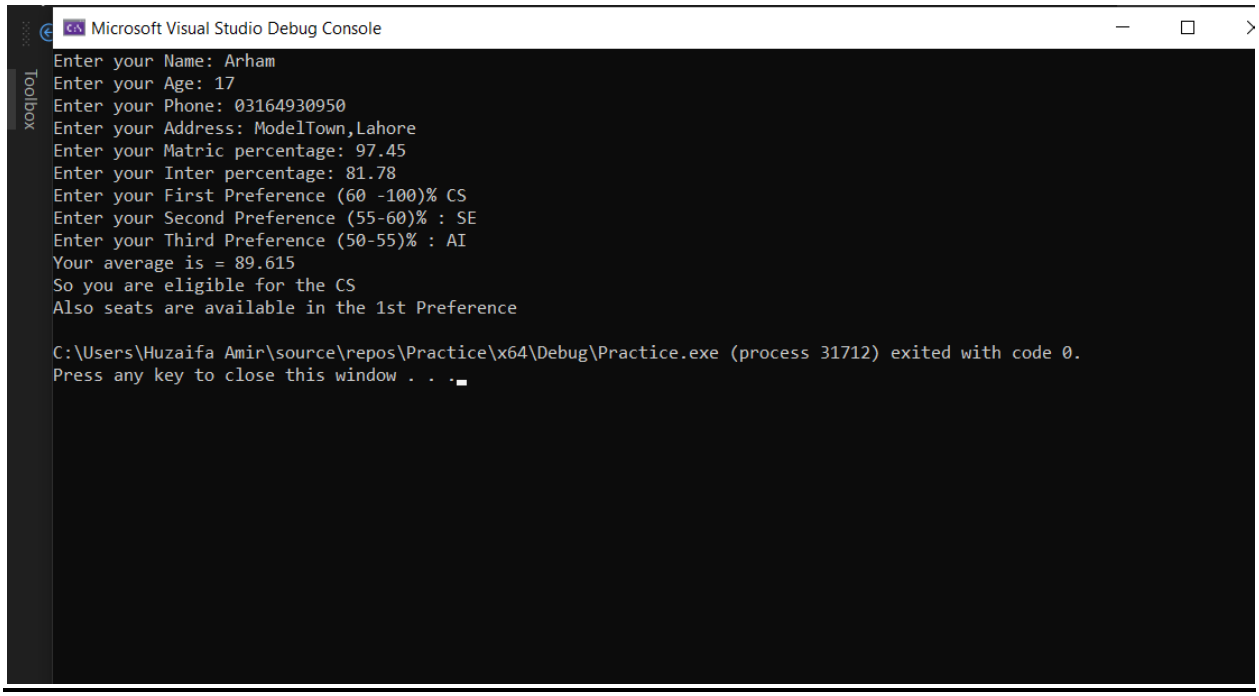

Figure 1.4 shows that compilation of code