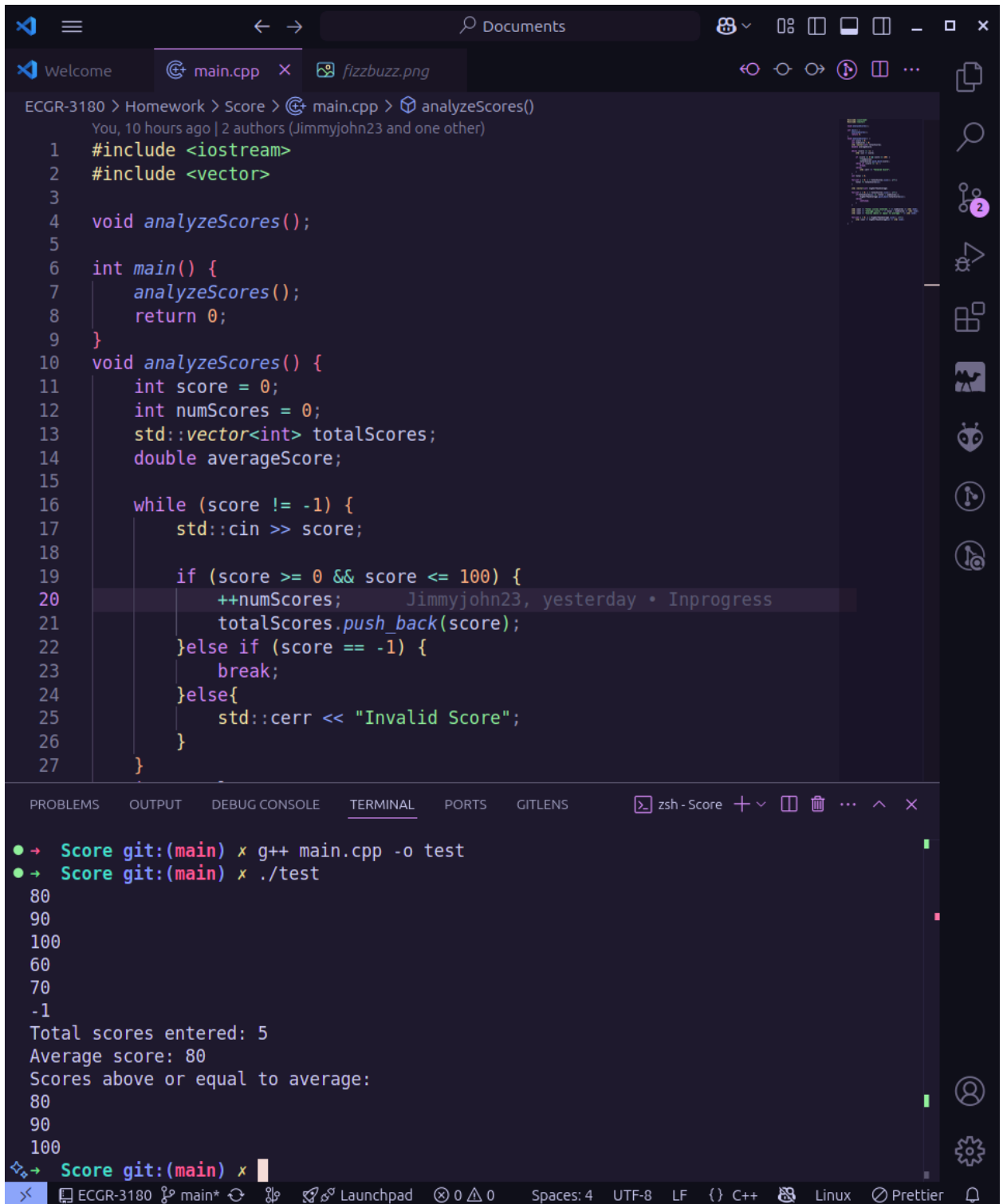


1. In this problem I must analyze scores provided by the user. I should count the number of scores entered, find the average score, and find the score above or equal to the average. The program must end when the user enters -1.
2. To solve this problem I will get each score and count the number of as I receive scores from the user. Then I can sum scores and divide the sum by the number I count to get the average. Then I will compare the average to each input received to see if the input is greater than or equal to the average.
3. My non AI attempt was the use a while loop that ends when the user inputs -1. I added an if statement to check if the score was between 0 and 100, if the score was -1 or something else. If the score was between 0 and 100 then it would be added to a score vector. If the score is -1 the while loop would break. If another input then an error message would appear and the while loop would continue. A simple for loop was used to go through vector to get the sum of scores and divide by the number of scores. I could erase elements from the vector using a for loop so I check if the score was higher than the average then add that score to the new vector if it's higher.
4. My non-AI attempt was successful but I turned to code completion to check how to erase elements from a vector without using another vector. I didn't understand how the solution worked so I didn't use it in my final solution. I looked up "removing elements with if statements and found `erase_if` function but I need to read more about it.
5. For the test I just decided to input negative numbers.



```
ECGR-3180 > Homework > Score > main.cpp > analyzeScores()
You, 10 hours ago | 2 authors (Jimmyjohn23 and one other)

1  #include <iostream>
2  #include <vector>
3
4  void analyzeScores();
5
6  int main() {
7      analyzeScores();
8      return 0;
9  }
10 void analyzeScores() {
11     int score = 0;
12     int numScores = 0;
13     std::vector<int> totalScores;
14     double averageScore;
15
16     while (score != -1) {
17         std::cin >> score;
18
19         if (score >= 0 && score <= 100) {
20             ++numScores;
21             totalScores.push_back(score);
22         } else if (score == -1) {
23             break;
24         } else {
25             std::cerr << "Invalid Score";
26         }
27     }
28 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS zsh - Score + - x

```
• → Score git:(main) x g++ main.cpp -o test
• → Score git:(main) x ./test
80
90
100
60
70
-1
Total scores entered: 5
Average score: 80
Scores above or equal to average:
80
90
100
Score git:(main) x
```

ECGR-3180 main* Launchpad 0 0 Spaces: 4 UTF-8 LF {} C++ Linux Prettier

6.

VS

Documents

main.cpp

fizzbuzz.png

ECGR-3180 > Homework > Score > main.cpp > analyzeScores()

```
6 int main() {
10 void analyzeScores() {
11     int score = 0;
12     int numScores = 0;
13     std::vector<int> totalScores;
14     double averageScore;
15
16     while (score != -1) {
17         std::cin >> score;
18
19         if (score >= 0 && score <= 100) {
20             ++numScores;
21             totalScores.push_back(score);
22         } else if (score == -1) {
23             break;
24         } else {
25             std::cerr << "Invalid Score";
26         }
27     }
28     int total = 0;
29
30     for(int i = 0; i < totalScores.size(); i++){
31         total += totalScores[i];
32     }
33
34     std::vector<int> higherThanAverage;
35
36     for(int i = 0; i < totalScores.size(); i++){
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

GITLENS

zsh - Score

```
-9
Invalid Score
90
80
70
60
100
-1
Total scores entered: 5
Average score: 80
Scores above or equal to average:
90
80
100
```

Score git:(main) x

ECGR-3180 main* Launchpad 0 0 Spaces: 4 UTF-8 LF {} C++ Linux Prettier