ERRORS:

```
while (!scanner.hasNextInt()) {
    scanner.nextLine(); // Clear the input buffer
    System.out.println("Incorrect input! Please enter an integer:");
}

// Loop until a positive integer is entered
while ((totalPeople = scanner.nextInt()) <= 0) {
    scanner.nextLine(); // Clear the input buffer
    System.out.println("You need to have at least one friend in the network. Please enter again:
}

// Step 2: Store names in a separate array
```

Problem when letters entered into input, this was fixed by creating a new while loop merging these two conditions then creating an else statement for letter/string input.

```
// Step 2: Store names in a separate array
String[] names = new String[totalPeople];
for (int i = 0; i < totalPeople; i++) {
    System.out.print("Enter name: ");
    names[i] = scanner.next();
}
```
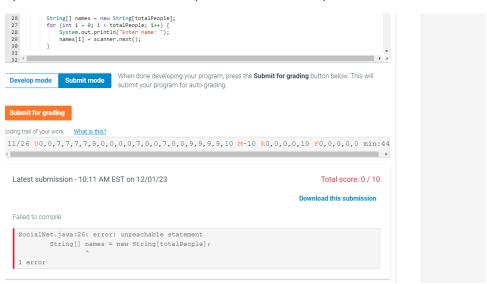
Improper format when asking for name input, had to create a print.ln;

```
while (true) {
    if (scanner.nextInt > 0) {
        totalPeople = scanner.nextInt();
        if (totalPeople > 0) {
            break;  // Exit the loop if a positive integer is entered
        } else {
            System.out.println("You need to have at least one friend in the network. Please enter a
        }
    } else {
        String invalidInput = scanner.next();
        System.out.println(invalidInput + "is an incorrect input! Please enter an integer.");
    }
}
```

Faulty loop logic; had to fix by using scanner.hasNextInt()

```
60        // Step 7: Output the total number of friends each person has
61        System.out.println("\nTotal Friends Count:");
62        for (int i = 0; i < totalpeople; i++) {
63            int totalFriends = 0;
64            for (int j = 0; j < totalPeople; j++) {
65                totalFriends += arrayOfFriends[i][j];
66        }
67
```

Develop mode | **Submit mode**   When done developing your program, press the **Submit for grading** button below. This will submit your program for auto-grading.

Submit for grading

oding trail of your work   What is this?

11/26 U0,0,7,7,7,7,9,0,0,0,0,7,0,0,7,0,0,9,9,9,9,10 M-10 R0,0,0,0,10 F0 min:43

Latest submission - 10:03 AM EST on 12/01/23   Total score: 0 / 10

Download this submission

Failed to compile

```
SocialNet.java:62: error: cannot find symbol
        for (int i = 0; i < totalpeople; i++) {
                            ^
    symbol:   variable totalpeople
    location: class SocialNet
1 error
```

Syntax error with variable in loop, fixed with totalPeople;

```
26        String[] names = new String[totalPeople];
27        for (int i = 0; i < totalPeople; i++) {
28            System.out.println("Enter name: ");
29            names[i] = scanner.next();
30        }
31
32
```

Develop mode | **Submit mode**   When done developing your program, press the **Submit for grading** button below. This will submit your program for auto-grading.

Submit for grading

oding trail of your work   What is this?

11/26 U0,0,7,7,7,7,9,0,0,0,0,7,0,0,7,0,0,9,9,9,9,10 M-10 R0,0,0,0,10 F0,0,0,0,0 min:44

Latest submission - 10:11 AM EST on 12/01/23   Total score: 0 / 10

Download this submission

Failed to compile

```
SocialNet.java:26: error: unreachable statement
        String[] names = new String[totalPeople];
                     ^
1 error
```

Unreachable code; fixed by changing the logic in the method;

PSUEDO CODE

```
function getValidInput(prompt):

    while true:

        print(prompt)

        input = readInput()

        if isInteger(input) and parseInt(input) > 0:

            return parseInt(input)

        else:

            print("Invalid input. Please enter a positive integer.")


function createFriendsArray(totalPeople):

    names = createArray(totalPeople)

    for i from 0 to totalPeople - 1:

        print("Enter name:")

        names[i] = readInput()

    return names


function createFriendshipMatrix(names, totalPeople):

    matrix = createMatrix(totalPeople, totalPeople)

    for i from 0 to totalPeople - 1:

        for j from 0 to totalPeople - 1:

            if i ≠ j and abs(names[i].charAt(0) - names[j].charAt(0)) ≤ 12:

                matrix[i][j] = 1

    return matrix


function displayMatrixAndFriendsCount(names, matrix, totalPeople):

    print("\t" + join(names, "\t"))

    for i from 0 to totalPeople - 1:

        print(names[i] + "\t" + join(matrix[i], "\t"))


    print("\nTotal Friends Count:")

    for i from 0 to totalPeople - 1:
```

```
        totalFriends = sum(matrix[i])

        print(names[i] + "\t" + totalFriends)


function main():

    totalPeople = getValidInput("What is the total number of friends in the network:")

    names = createFriendsArray(totalPeople)

    friendshipMatrix = createFriendshipMatrix(names, totalPeople)

    displayMatrixAndFriendsCount(names, friendshipMatrix, totalPeople)
```