

# Contact Tracing

Our sports club is currently under investigation for covid-19. A few of our members have been diagnosed with the virus and we are looking to find members in our club who have been in contact with those individuals.

Our club allows only 3 members at a time into our facility. Every member must sign-in upon entrance. Attached you will find the file that contains the sign-in log with member name and age in the exact order they signed in to enter our facilities. Your task is to create a program that allows us to see possible direct contacts between a member and other members of the club.

**Feature #1 Search Direct Contacts:** User enters a member name and you will display 2 individuals who signed in right before that member and another 2 individuals who signed in right after the given member.

**Feature #2 Search User Pool:** Users enter 3 names and we check if these 3 members ever signed in back to back. They may have signed in different order.

**Feature #3 Display Member Profile:** Display the minimum and maximum age among our members as well as the average age of all members.

1- Search Direct Contacts  
2- Search User Pool  
3- Member Summary  
0- Exit

Choice: **1**

Name: **John**

Direct Contacts

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Charlotte

Carl

Kelvin

Agata

Kristian

Carina

Ellia

Kevin

1- Search Direct Contacts  
2- Search User Pool  
3- Member Summary  
0- Exit

Choice: **1**

Name: **Ali**

Direct Contacts

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cannot find member in the system

1- Search Direct Contacts  
2- Search User Pool  
3- Member Summary  
0- Exit

Choice: **2**

Name1: **John**

Name2: **Carl**

Name3: **Charlotte**

Yes these members have been in direct contact.

1- Search Direct Contacts  
2- Search User Pool  
3- Member Summary  
0- Exit

Choice: **2**

Name1: **Carl**

Name2: **John**

Name3: **Alice**

No evidence in logs.

1- Search Direct Contacts  
2- Search User Pool  
3- Member Summary  
0- Exit

Choice: **3**

Min Age: 18

Max Age: 30

Avg. : 24.13

1- Search Direct Contacts  
2- Search User Pool  
3- Member Summary  
0- Exit

Choice: **0**