

PSUEDOCODE:

START

Prompt user: "Enter total number of people in the network"

WHILE input is not a valid positive integer

 Display error and prompt again

Create a list 'names' of size total_people

FOR i from 0 to total_people - 1

 Prompt: "Enter name i"

 Store name in 'names[i]'

Create 2D list 'arrayOfFriends' of size total_people x total_people, initialized to 0

FOR each person i

 FOR each person j

 IF $i \neq j$ AND difference between first letters of names[i] and names[j] ≤ 12

 Set arrayOfFriends[i][j] = 1

Print header row with names

FOR each person i

 Print name[i]

 FOR each person j

 Print arrayOfFriends[i][j] with tab spacing

Print "Total Friends Count:"

FOR each person i

totalFriends = sum of arrayOfFriends[i]

Print names[i] and totalFriends

END

TEST RUNS:

```
avi@Avis-MacBook-Pro ~ % /usr/local/bin/python3 /Users/avi/Desktop/SocialNetSharma.py
What is the total number of friends in the network: 2
Enter name 1: Tien
Enter name 2: Avii

    Tien    Avii
Tien    0      0
Avii    0      0

Total Friends Count:
Tien    0
Avii    0

avi@Avis-MacBook-Pro ~ % /usr/local/bin/python3 /Users/avi/Desktop/SocialNetSharma.py
What is the total number of friends in the network: 4
Enter name 1: Carter
Enter name 2: Ayush
Enter name 3: Avi
Enter name 4: Tien

    Carter  Ayush  Avi   Tien
Carter    0      1    1     0
Ayush     1      0    1     0
Avi        1      1    0     0
Tien      0      0    0     0

Total Friends Count:
Carter    2
Ayush     2
Avi        2
Tien      0
```

```
avi@Avis-MacBook-Pro ~ % /usr/local/bin/python3 /Users/avi/Desktop/SocialNetSharma.py
What is the total number of friends in the network: f
That is an incorrect input! Please enter an integer.
What is the total number of friends in the network: 2
Enter name 1: Burak
Enter name 2: Andrew
```

	Burak	Andrew
Burak	0	1
Andrew	1	0

```
Total Friends Count:
Burak 1
Andrew 1
```

```
avi@Avis-MacBook-Pro ~ % /usr/local/bin/python3 /Users/avi/Desktop/SocialNetSharma.py
What is the total number of friends in the network: 1
Enter name 1: Hanchae
```

	Hanchae
Hanchae	0

```
Total Friends Count:
Hanchae 0
```

```
avi@Avis-MacBook-Pro ~ % /usr/local/bin/python3 /Users/avi/Desktop/SocialNetSharma.py
What is the total number of friends in the network: 10
Enter name 1: Burak
Enter name 2: Tien
Enter name 3: Avi
Enter name 4: Ayush
Enter name 5: Carter
Enter name 6: Sam
Enter name 7: Caleb
Enter name 8: Hanchae
Enter name 9: Senay
Enter name 10: Julian
```

	Burak	Tien	Avi	Ayush	Carter	Sam	Caleb	Hanchae	Senay	Julian
Burak	0	0	1	1	1	0	1	1	0	1
Tien	0	0	0	0	0	1	0	1	1	1
Avi	1	0	0	1	1	0	1	1	0	1
Ayush	1	0	1	0	1	0	1	1	0	1
Carter	1	0	1	1	0	0	1	1	0	1
Sam	0	1	0	0	0	0	0	1	1	1
Caleb	1	0	1	1	1	0	0	1	0	1
Hanchae	1	1	1	1	1	1	1	0	1	1
Senay	0	1	0	0	0	1	0	1	0	1
Julian	1	1	1	1	1	1	1	1	1	0

```
Total Friends Count:
Burak 6
Tien 4
Avi 6
Ayush 6
Carter 6
Sam 4
Caleb 6
Hanchae 9
Senay 4
Julian 9
```

```
avi@Avis-MacBook-Pro ~ %
```