Case 1: run through all options

Console

```
<terminated> matrix_app.py [C:\Users\nor67\AppData\Local\Programs\Python\Python

**********WELCOME TO THE PYTHON MATRIX APPLICATION**********

Do you want to play the Matrix game? (yes or no)
yes
Enter your phone number (XXX-XXX-XXXX):
456-456-4564
Enter your zipcode (XXXXX-XXXX):
45645-6456
Enter the first 3 x 3 matrix:
1 1 1
2 2 2
3 3 3
Your first 3 x 3 matrix is:
1 1 1
2 2 2
3 3 3
Enter the second 3 x 3 matrix:
4 4 4
5 5 5
6 6 6
Your second 3 x 3 matrix is:
4 4 4
5 5 5
6 6 6
Select a Matrix Operation from the list below:
            a. Addition
            b. Subtraction
            c. Matrix Multiplication
            d. Element by element multiplication

a
You selected addition. The results are:
5 5 5
7 7 7
9 9 9

The Transpose is:
5 7 9
5 7 9
5 7 9
```

Case 1

```
Console
<terminated> matrix_app.py [C:\Users\nor67\AppData\Local\Programs\Python\
The row and column mean values of the results are:
Row:
5.00  7.00  9.00
Column:
7.00  7.00  7.00

Do you want to play the Matrix game? (yes or no)
yes
Enter your phone number (XXX-XXX-XXXX):
444-555-6666
Enter your zipcode (XXXXX-XXXX):
44444-5555
Enter the first 3 x 3 matrix:
7 7 7
8 8 8
9 9 9
Your first 3 x 3 matrix is:
7 7 7
8 8 8
9 9 9
Enter the second 3 x 3 matrix:
0 0 0
1 1 1
2 2 2
Your second 3 x 3 matrix is:
0 0 0
1 1 1
2 2 2
Select a Matrix Operation from the list below:
            a. Addition
            b. Subtraction
            c. Matrix Multiplication
            d. Element by element multiplication

b
You selected subtraction. The results are:
7 7 7
7 7 7
7 7 7
```

Case 1

Console

```
<terminated> matrix_app.py [C:\Users\nor67\AppData\Local\Programs\Python\
The Transpose is:
7 7 7
7 7 7
7 7 7

The row and column mean values of the results are:
Row:
7.00  7.00  7.00
Column:
7.00  7.00  7.00

Do you want to play the Matrix game? (yes or no)
yes
Enter your phone number (XXX-XXX-XXXX):
777-777-7777
Enter your zipcode (XXXXX-XXXX):
88888-9999
Enter the first 3 x 3 matrix:
4 5 4
6 7 6
8 9 8
Your first 3 x 3 matrix is:
4 5 4
6 7 6
8 9 8
Enter the second 3 x 3 matrix:
1 2 1
3 4 3
5 6 5
Your second 3 x 3 matrix is:
1 2 1
3 4 3
5 6 5
Select a Matrix Operation from the list below:
            a. Addition
            b. Subtraction
            c. Matrix Multiplication
            d. Element by element multiplication
```

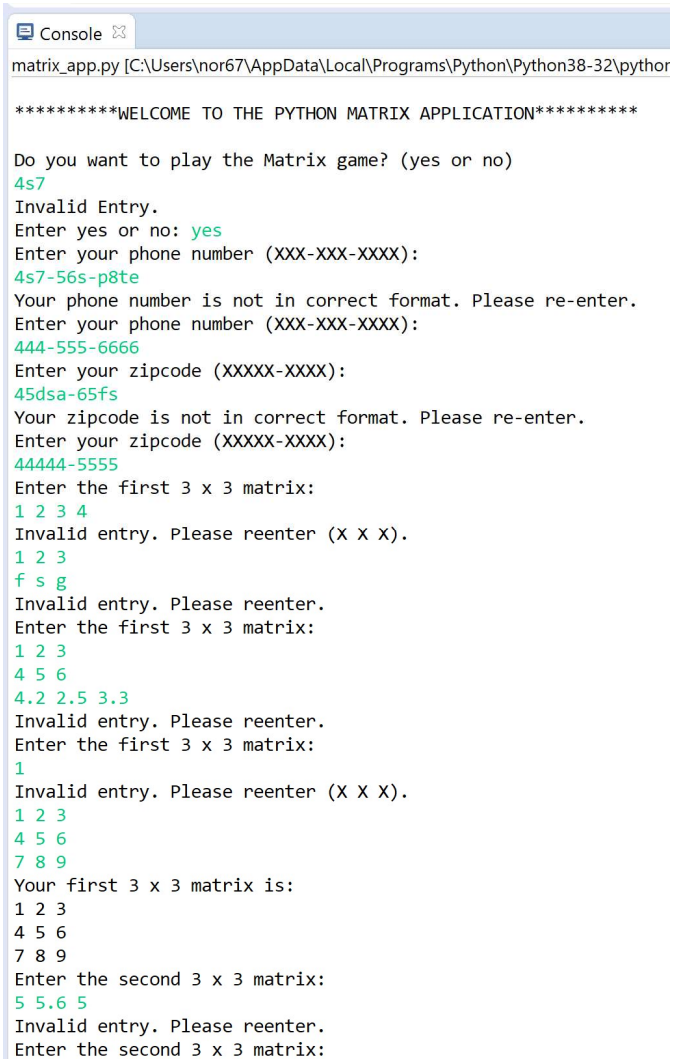
Case 1

Console

<terminated> matrix_app.py [C:\Users\nor67\AppData\Local\Programs\Python\

```
c
You selected matrix multiplication. The results are:
4 10 4
18 28 18
40 54 40

The Transpose is:
4 18 40
10 28 54
4 18 40

The row and column mean values of the results are:
Row:
6.00  21.33  44.67
Column:
20.67  30.67  20.67

Do you want to play the Matrix game? (yes or no)
yes
Enter your phone number (XXX-XXX-XXXX):
333-333-3333
Enter your zipcode (XXXXX-XXXX):
45454-6666
Enter the first 3 x 3 matrix:
5 5 5
6 6 6
7 7 7
Your first 3 x 3 matrix is:
5 5 5
6 6 6
7 7 7
Enter the second 3 x 3 matrix:
9 9 9
8 8 8
7 7 7
Your second 3 x 3 matrix is:
9 9 9
8 8 8
7 7 7
Select a Matrix Operation from the list below:
            a. Addition
            b. Subtraction
            c. Matrix Multiplication
            d. Element by element multiplication

d
You selected element by element multiplication. The results are:
45 45 45
48 48 48
49 49 49

The Transpose is:
45 48 49
45 48 49
45 48 49

The row and column mean values of the results are:
Row:
45.00  48.00  49.00
Column:
47.33  47.33  47.33

Do you want to play the Matrix game? (yes or no)
no
Thank you for visiting the Python Matrix Application. Good day.
```

Case 2: invalid inputs



Case 2

Console

```
matrix_app.py [C:\Users\nor67\AppData\Local\Programs\Python\Python38-32\pytho
7 8 9
Your first 3 x 3 matrix is:
1 2 3
4 5 6
7 8 9
Enter the second 3 x 3 matrix:
5 5.6 5
Invalid entry. Please reenter.
Enter the second 3 x 3 matrix:
1 2 3
4 5 6
7 8 9
Your second 3 x 3 matrix is:
1 2 3
4 5 6
7 8 9
Select a Matrix Operation from the list below:
            a. Addition
            b. Subtraction
            c. Matrix Multiplication
            d. Element by element multiplication

4s7
Invalid Entry.
Enter a, b, c, or d: a
You selected addition. The results are:
2 4 6
8 10 12
14 16 18

The Transpose is:
2 8 14
4 10 16
6 12 18

The row and column mean values of the results are:
Row:
4.00  10.00  16.00
Column:
8.00  10.00  12.00

Do you want to play the Matrix game? (yes or no)
```