The Matrix Flippy-Flop

Description:

I will write a program that takes a two-dimensional array and flippy-flops it. Some people would use the technical, mathematical term: calling it the "transpose" of the matrix. But to them, I say that's no fun. Therefore, I will call my procedure the Flippy-Flop since it flip-flops the matrix across its diagonal. The matrix contents and length will be known at compile time. The matrix will be square as well.

Prototype Code:

```
1   def flippyFlop(matrix):
2       temp = [[0,0,0],[0,0,0],[0,0,0]]
3       for i in range(3):
4           for j in range(3):
5               temp[i][j] = matrix[j][i]
6       return temp
7
8   arr = [[1, 2, 3],
9          [4, 5, 6],
10         [7, 8, 9]]
11
12  print("Original Matrix: " + str(arr))
13  flipArr = flippyFlop(arr)
14  print("Flipped Matrix:  " + str(flipArr))
```

```
Original Matrix: [[1, 2, 3], [4, 5, 6], [7, 8, 9]]
Flipped Matrix:  [[1, 4, 7], [2, 5, 8], [3, 6, 9]]
```