CS 160
CS Orientation

More Lists in Python…

Odds and Ends

- Assignment #8 questions?

Lists vs. Arrays

- Python supports lists, but we will use them as arrays

- Arrays are all same data type and contiguous in memory

- Lists can vary in data types and they are not necessarily contiguous.

- Both list and arrays are linear data structures

2-D Array Demo…

- What is it?

- When would you use one?

Exercise #6: 2-d Arrays

- Get into groups. Answer the following.

- How would we change the travel program to have a 2-d array for multiple trips?

- How would you write calculate_trips()?

```python
1 def print_board(b):
2     print(b[0][0]+'|'+b[0][1]+'|'+b[0][2])
3     print('-----')
4     print(b[1][0]+'|'+b[1][1]+'|'+b[1][2])
5     print('-----')
6     print(b[2][0]+'|'+b[2][1]+'|'+b[2][2])
7
8 def get_location(b,p):
9     row=int(input("Enter the row, 0-2: "))
10     col=int(input("Enter the col, 0-2: "))
11     b[row][col]=p
12
13 def main():
14     board=[[' ']*3, [' ']*3, [' ']*3]
15     print_board(board)
16     player1='x'
17     player2='o'
18
19     while((not winner) and turn<=9):
20         player_piece=player1
21         get_location(board,player_piece)
22         print_board(board)
23
24
25 main()
```

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