PYTHON EXERCISES

EXERCISE 1 (1/2)

Consider the list v1 below:

```
v1 = [2,3,1]
```

What is v1[1]

EXERCISE 1 (2/2)

Consider the dictionary v2 below:

```
v2 = {2:0, 4:1, 1:3}
```

What is v2[1]?

EXERCISE 2 (1/2)

Consider the list people below:

```
people = [{'name':'Alice', 'gender':'F', 'age':15},
          {'name':'Bob', 'gender':'M', 'age':20},
          {'name':'Claire', 'gender':'F', 'age':25},
          {'name':'David', 'gender':'M', 'age':30}]
```

Write a function names() that takes in a list like this and returns just the names of the players such that

```
names(people) = ['Alice', 'Bob', 'Claire', 'David']
```

EXERCISE 2 (2/2)

Consider the same list people below:

```
people = [{'name':'Alice', 'gender':'F', 'age':15},
          {'name':'Bob', 'gender':'M', 'age':20},

          {'name':'Claire', 'gender':'F', 'age':25},
          {'name':'David', 'gender':'M', 'age':30}]
```

Write a function filter_adult() that returns just the people over 18 years such that

```
filter_adult(people) = [{'name':'Bob', 'gender':'M', 'age':20},
                        {'name':'Claire', 'gender':'F', 'age':25}
                        {'name':'David', 'gender':'M', 'age':30}]
```

EXERCISE 3

1. Write a function odd_even() that takes as input an integer and prints a message stating whether the number is even or odd

2. Write a function even_divide that takes as input two numbers: one number to check (call it num) and one number to divide by (call it div) if div divides evenly into num, print an appropriate message. If not, print a different appropriate message

EXERCISE 4

- Define the following list li:

```
li = [1,1,2,3,5,8,13,21,34,55,89]
```

1. Write a piece of code that prints out all the elements of the list that are strictly less than 13

2. Make a new list other_li that has all the elements strictly less that 13 from li in it and print out this new list