Assignment 2

Question 1 (Easy):

What will the following code output? You can use CoLab or shell to check out the output by running the code.

- 1 == 1.0
- 8//3 == 2
- 2 == "2"
- 3 >= 5
- 6 >= 13%7

- 'string' == "string"
- True and 1 == 2
- False or 5//3 == 4//3

Question 2 (Easy):

Type this in your python shell or in google CoLab: x = [1, 9, 0, 6]

Use the list methods to update the list so it looks like the following:

- [1, 9, 0, 6, 2]
- [1, 5, 9, 0, 6, 2]
- [1, 5, 9, 0, 6]
- [1, 5, 9, 6]
- [1, 5, 6, 9]

Question 3 (medium):

Remember the backstory from assignment 1?
Let's say that you are a programmer for the Govt. of Delhi, India. The Govt. of Delhi has recently filed a law about even and odd number plates on cars in Delhi. Even and odd cars can stay on road alternatively to reduce pollution. They have already placed cameras to figure out the number on the plate of all cars. And you are given this number as an integer (n).

Question:

- Get the car's number from the user, (hint: use the function 'input()'),
- Get the eligible day from user (odd or even)
- Depending on whether the day is even or odd, print if they can drive the car with the given number.

Example output:

Enter the car number: 1235

Enter 'even' for even day or 'odd' for odd day: EVEN

Sorry, that is an odd number plate, this car is not eligible to drive today

Enter the car number: 1235

Enter 'even' for even day or 'odd' for odd day: Odd

Hooray, you got an odd number plate, you can drive this car today

Hint: You might need to use string methods to take 'even' or 'odd' in any form

Question 4:

Type this in your python shell or in google CoLab:

x = "Tu8AepQfAuI@ts@dava1Qd7kaRLMQ^ RziZUl!EA1X omaSRYPL"

Question:

- convert the string into a list
- if the list has a vowel (a, e, i, o, u) then print “{vowel} at {index}: Woah! There is a vowel”

Example output:

If you found `a` at index 1 and `e` at index 5 then print:

“a at 1: Woah! There is a vowel”

“e at 5: Woah! There is a vowel”

Hint: Use loops! Also, you might need an extra variable before the loop to keep track of index