Tutorial 4

1. Given `x = [1, 2, 3]`, write the Python code to:

   (a) Create a list `y` such that changing `x` also changing `y`
   (b) Create a list `y` such that changing `x` does not change `y`

```
x,y:  [1, 555, 3] [1, 555, 3]
x,y:  [1, 555, 3] [1, 2, 3]
```

2. Come up with four different ways to create list of 25 1's without simply typing 25 1's(Hint: You can use `for` and `while` loop with `append()` method for two of the ways)

```
[1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1]
[1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1]
[1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1]
[1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1]
```

3. Write a code using a `for` loop that take a string S as an argument and returns S in reversed order. For example if S = "Python", it should return "nohtyP"

```
Enter a string : Python
The reversed of  Python  is  nohtyP
```

4. Write a code to count how many words (case in insensitive) in a string, and print how many does each word appear in the string .

```
Enter  a  string  :  Abu  went  to  FESKUM
today. Abu went with Ali.
There are 9 words.
The occurrences of each word are:
abu:    2
ali:    1
feskum: 1
to:     1
today:  1
went:   2
with:   1
```