3a. Write a Python program that accepts a sentence and find the number of words, digits, uppercase letters and lowercase letters.

```
x = input("Enter a sentence")

y = x

print("There are",len(x.split())," words in the sentence")

digits,upper,lower=0,0,0

for i in x:

    if i.isdigit():

        digits+=1

    elif i.isupper():

        upper+=1

    elif i.islower():

        lower+=1

print("There are {0} digits, {1} upper case characters and {2} lower case characters in the sentence".format(digits,upper,lower))
```

Output :

Enter a sentence Hi Hello Bangalore

There are 3 words in the sentence

There are 0 digits, 3 upper case characters and 13 lower case characters in the sentence

3b. Write a Python program to find the string similarity between two given strings

Sample Output:

Original string:
Python Exercises
Python Exercises
Similarity between two said strings:
1.0

Sample Output:

Original string:
Python Exercises
Python Exercise
Similarity between two said strings:
0.967741935483871

```
if __name__ == '__main__':
    x = input("Enter first String")
    y = input("Enter second String")

    x = x.strip()
    y = y.strip()
    sim=0
    if len(x)>len(y):
        xx = x
        yy = y
    else:
        xx = y
        yy = x
    j=0
    for i in yy:
        if i==xx[j]:
            sim+=1
```

```
        else:
            pass
        j+=1
    similarity = (sim/len(xx))
    print("The similarity between the two given strings is", similarity)
```

Output:

1. Enter first String Bangalore

   Enter second String Mysore

   The similarity between the two given strings is 0.0
2. Enter first String Hello

   Enter second String Hello

   The similarity between the two given strings is 1.0
3. Enter first String Bangeluru

   Enter second String Bangalore

   The similarity between the two given strings is 0.6666666666666666