Unit - 7

Assignment

1) Python program to print even length words in a string
   Input: s = "This is a python language"
   Output: This is python language

2) Python program to check if a string has at least one letter and one number
   Input: welcome2ourcountry34
   Output: True

3) Python program to find Frequency of numbers in String

   Output
   The original string is : pythonfor data analyst is No. 1 4 python
   Count of numerics in string : 2

4) Write a program to Swap commas and dots in a String
   Input : 14, 625, 498.002
   Output : 14.625.498, 002

5) Calculate the sum and average of the digits present in a string
   input_str = "Datapython29@#8496"
   Output
   Sum is: 38 Average is 6.333333333333333

6) Count all letters, digits, and special symbols from a given string
   input "A@un2st&#i5ve"
   Output
   Chars = 8 Digits = 2 Symbol = 3

7) Take the input from the user and reverse it

Unit 7

Assignment Solution

In [ ]:
```
Question 1 - Python program to print
even length words in a string
Input: s = "This is a python language"
Output: This is python language
```

In [4]:
```
n="This is a python language"
s=n.split(" ")
for i in s:
    if len(i)%2==0:
        print(i)
```

```
This
is
python
language
```

In [ ]:
```
Question 2 - Python program to check if a string
has at least one letter and one number
Input: welcome2ourcountry34
Output: True
```

In [5]:
```
def checkString(str):


    flag_l = False
    flag_n = False


    for i in str:


        if i.isalpha():
            flag_l = True


        if i.isdigit():
            flag_n = True


    return flag_l and flag_n
```

In [9]:
```
checkString("welcome2ourcountry25")
```

Out[9]:
```
True
```

In [ ]:
```
Question 3 - Python program to find Frequency of numbers in String

Output
The original string is : pythonfor data analyst is No. 1 4 python
Count of numerics in string : 2
```

In [11]:
```
import re


test_str = "pythonfor data analyst is No. 1 4 python"
print("The original string is : " + test_str)

res = len(re.findall(r'\d+', test_str))

print("Count of numerics in string : " + str(res))
```

```
The original string is : pythonfor data analyst is No. 1 4 python
Count of numerics in string : 2
```

In [ ]:
```
Question 4 - Write a program to Swap commas and dots in a String
Input : 14, 625, 498.002
Output : 14.625.498, 002
```

In [15]:
```
def Replace(str1):
    str1 = str1.replace(', ', 'third')
    str1 = str1.replace('.', ', ')
    str1 = str1.replace('third', '.')
    return str1

string = "14, 625, 498.002"
```

In [16]:
```
Replace(string)
```

Out[16]:
```
'14.625.498, 002'
```

In [ ]:
```
Question 5 - Calculate the sum and average
of the digits present in a string

input_str = "Datapython29@#8496"
Output
Sum is: 38 Average is  6.333333333333333
```

In [18]:
```
input_str = "Datapython29@#8496"
total = 0
cnt = 0
for char in input_str:
    if char.isdigit():
        total += int(char)
        cnt += 1

# average = sum / count of digits
avg = total / cnt
print("Sum is:", total, "Average is ", avg)
```

```
Sum is: 38 Average is  6.333333333333333
```

In [ ]:
```
Question 6 - Count all letters, digits, and
special symbols from a given string
input "A@un2st&#i5ve"
Output
Chars = 8 Digits = 2 Symbol = 3
```

In [20]:
```
def find_digits_chars_symbols(sample_str):
    char_count = 0
    digit_count = 0
    symbol_count = 0
    for char in sample_str:
        if char.isalpha():
            char_count += 1
        elif char.isdigit():
            digit_count += 1
        # if it is not letter or digit then it is special symbol
        else:
            symbol_count += 1

    print("Chars =", char_count, "Digits =", digit_count, "Symbol =", symbol_c

sample_str = "A@un2st&#i5ve"
print("total counts of chars, Digits, and symbols \n")
find_digits_chars_symbols(sample_str)
```

```
total counts of chars, Digits, and symbols

Chars = 8 Digits = 2 Symbol = 3
```

In [ ]:
```
Question 7 - take the input from the user and reverse it
```

In [22]:
```
a = input('Enter the string')
print("the reverse of the string is",a[::-1])
```

```
Enter the stringswati
the reverse of the string is itaws
```

In [ ]:
```
```