In [2]:
```python
# Question 1: Write a Python program to count the occurrences of each word

string = "To change the overall look of your document. To change the look a

# Convert the string to lowercase to avoid case mismatch
string = string.lower()

# Split the string into individual words
words = string.split()

# Create an empty dictionary to store word counts
word_count = {}

# Iterate through each word in the list and count occurrences
for word in words:
    if word in word_count:
        word_count[word] += 1
    else:
        word_count[word] = 1

# Display the word count
print("Word occurrences:", word_count)
```

```
Word occurrences: {'to': 2, 'change': 2, 'the': 3, 'overall': 1, 'look':
2, 'of': 1, 'your': 1, 'document.': 1, 'available': 1, 'in': 1, 'gallery':
1}
```

In [3]:
```python
# Question 2: Write a Python program to remove a newline in Python.

string = "\nBest \nDeeptech \nPython \nTraining\n"

# Using the replace() method to remove newlines
cleaned_string = string.replace("\n", " ")

# Displaying the cleaned string
print("String without newlines:", cleaned_string.strip())
```

```
String without newlines: Best  Deeptech  Python  Training
```

In [4]:
```python
# Question 3: Write a Python program to reverse words in a string.

string = "Deeptech Python Training"

# Split the string into individual words
words = string.split()

# Reverse the list of words
reversed_words = words[::-1]

# Join the reversed words back into a string
reversed_string = " ".join(reversed_words)

# Display the reversed string
print("Reversed string:", reversed_string)
```

Reversed string: Training Python Deeptech

In [5]:
```python
# Question 4: Write a Python program to count and display the vowels of a g

string = "Welcome to python Training"

# Convert the string to lowercase to handle both uppercase and lowercase vo
string = string.lower()

# Define a set of vowels
vowels = "aeiou"

# Initialize a counter for vowels
vowel_count = 0

# Iterate through each character in the string and check if it's a vowel
for char in string:
    if char in vowels:
        vowel_count += 1

# Display the count of vowels
print(f"The number of vowels in the string is: {vowel_count}")
```

The number of vowels in the string is: 8

```python
In [ ]:   # Question 5: Write a Python program to check if a given string is a palind

          # Taking input from the user
          string = input("Enter a string to check if it is a palindrome: ")

          # Removing spaces and converting to lowercase
          cleaned_string = string.replace(" ", "").lower()

          # Checking if the string is equal to its reverse
          if cleaned_string == cleaned_string[::-1]:
              print(f"'{string}' is a palindrome.")
          else:
              print(f"'{string}' is not a palindrome.")
```

Enter a string to check if it is a palindrome:

String Method

```python
In [1]:   #1. Count all letters, digits, and special symbols from the given string.

          input_str = "P@#yn26at^&i5ve"
          chars, digits, symbols = 0, 0, 0

          for char in input_str:
              if char.isalpha():
                  chars += 1
              elif char.isdigit():
                  digits += 1
              else:
                  symbols += 1

          print(f"Chars = {chars} Digits = {digits} Symbols = {symbols}")
```

Chars = 8 Digits = 3 Symbols = 4

```python
In [2]:   #2. Remove duplicate characters from a given string

          input_str = "String and String Function"
          result = ""
          for char in input_str:
              if char not in result:
                  result += char
          print(result)
```

String adFuco

In [3]:
```python
#3. Count Uppercase, Lowercase, special characters, and numeric values in a

input_str = "Hell0 W0rld ! 123 * # welcome to pYtHoN"
upper_case, lower_case, num_case, special_case = 0, 0, 0, 0

for char in input_str:
    if char.isupper():
        upper_case += 1
    elif char.islower():
        lower_case += 1
    elif char.isdigit():
        num_case += 1
    else:
        special_case += 1

print(f"UpperCase: {upper_case} LowerCase: {lower_case} NumberCase: {num_ca
```

UpperCase: 5 LowerCase: 18 NumberCase: 5 SpecialCase: 11

In [4]:
```python
#4. Count vowels in a string.

input_str = "Welcome to Python Assignment"
vowels = "aeiouAEIOU"
vowel_count = sum(1 for char in input_str if char in vowels)

print(f"Total vowels are: {vowel_count}")
```

Total vowels are: 8