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from collections import Counter

def count_chars_digits_symbols(s):
    counts = Counter()
    for char in s:
        if char.isalpha():
            counts['chars'] += 1
        elif char.isdigit():
            counts['digits'] += 1
        else:
            counts['symbols'] += 1
    return counts

s1 = "P@#yn26at^&i5ve"
result1 = count_chars_digits_symbols(s1)
print(f"Chars = {result1['chars']} Digits = {result1['digits']} Symbol = {result1['symbols']}")

```

➞ Chars = 8 Digits = 3 Symbol = 4

```

def remove_duplicates(s):
    seen = set()
    result = []
    for char in s:
        if char not in seen or char == ' ':
            result.append(char)
            seen.add(char)
    return ''.join(result)

s2 = "String and String Function"
result2 = remove_duplicates(s2)
print(result2)

```

➞ String ad Fuco

```

def count_upper_lower_special_numbers(s):
    counts = Counter()
    for char in s:
        if char.isupper():
            counts['uppercase'] += 1
        elif char.islower():
            counts['lowercase'] += 1
        elif char.isdigit():
            counts['numbers'] += 1
        else:
            counts['special'] += 1
    return counts

s3 = "Hell0 W0rld ! 123 * # welcome to pYtHoN"
result3 = count_upper_lower_special_numbers(s3)
print(f"UpperCase : {result3['uppercase']} LowerCase : {result3['lowercase']} NumberCase : {result3['numbers']} SpecialCase : {result3['special']}")

```

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

```

def count_vowels(s):
    vowels = 'aeiouAEIOU'
    return sum(1 for char in s if char in vowels)

s4 = "Welcome to Python Assignment"
result4 = count_vowels(s4)
print(f"Total vowels are: {result4}")

```

➞ Total vowels are: 8

Start coding or [generate](#) with AI.

