# Problem 1

sentence = "programming with Python is Fun and Exciting!"

print(sentence.upper())

print(sentence.lower())

print(sentence.title())

print(sentence.capitalize())

# Problem 2

input\_str = "###---example---text---###"

characters\_to\_remove = "-#"

result\_str = input\_str.strip(characters\_to\_remove)

print(result\_str)

# Problem 3

username = "user123"

project\_name = "my\_project"

path = r"C:\users\{}\desktop\{}".format(username, project\_name)

print(path)

# Problem 4

mixed\_quotes = 'This is a string with "double quotes" and \'single quotes\'.'

print(mixed\_quotes)

# Problem 5

text = "Python programming is versatile, and Python developers are in demand."

count\_python = text.lower().count("python")

print(count\_python)

# Problem 6

sentence = "Programming with Python is Fun and Exciting!"

index\_exciting = sentence.find("Exciting")

print(index\_exciting)

# Problem 7

text\_alnum = "MyPassword123"

print(text\_alnum.isalnum())

print(text\_alnum.isalpha())

print(text\_alnum.isdigit())

print(text\_alnum.islower())

print(text\_alnum.isupper())

# Problem 8

text\_special = "special\_characters@123"

print(text\_special.isalnum())

print(text\_special.isalpha())

print(text\_special.isdigit())

print(text\_special.islower())

print(text\_special.isupper())