Here are the Python programs for your requested tasks:

**1. Find Words Greater Than a Given Length k**

# Function to find words greater than given length

def words\_greater\_than\_k(string, k):

words = string.split()

result = [word for word in words if len(word) > k]

return result

# Input from user

string = input("Enter a string: ")

k = int(input("Enter the value of k: "))

print(f"Words with length greater than {k}: {words\_greater\_than\_k(string, k)}")

**2. Remove the i-th Character from a String**

# Function to remove the i-th character

def remove\_char\_at(string, i):

return string[:i] + string[i+1:]

# Input from user

string = input("Enter a string: ")

i = int(input("Enter the index of the character to remove: "))

print(f"String after removing the {i}-th character: {remove\_char\_at(string, i)}")

**3. Split and Join a String**

# Function to split and join a string

def split\_and\_join(string):

words = string.split() # Split by spaces

return '-'.join(words) # Join by hyphen

# Input from user

string = input("Enter a string: ")

print(f"String after split and join: {split\_and\_join(string)}")

**4. Check if a Given String is a Binary String**

# Function to check if the string is binary

def is\_binary\_string(string):

return all(char in '01' for char in string)

# Input from user

string = input("Enter a string: ")

if is\_binary\_string(string):

print("The string is a binary string.")

else:

print("The string is not a binary string.")

**5. Find Uncommon Words from Two Strings**

# Function to find uncommon words

def uncommon\_words(string1, string2):

words1 = set(string1.split())

words2 = set(string2.split())

return (words1 - words2).union(words2 - words1)

# Input from user

string1 = input("Enter first string: ")

string2 = input("Enter second string: ")

print(f"Uncommon words: {uncommon\_words(string1, string2)}")

**6. Find All Duplicate Characters in a String**

# Function to find duplicate characters

def find\_duplicates(string):

duplicates = [char for char in set(string) if string.count(char) > 1]

return duplicates

# Input from user

string = input("Enter a string: ")

print(f"Duplicate characters: {find\_duplicates(string)}")

**7. Check if a String Contains Any Special Character**

# Function to check for special characters

import re

def contains\_special\_char(string):

return bool(re.search(r'[^a-zA-Z0-9]', string))

# Input from user

string = input("Enter a string: ")

if contains\_special\_char(string):

print("The string contains special characters.")

else:

print("The string does not contain special characters.")