

1. Write a Python program to find words which are greater than given length k?
2. Write a Python program for removing i-th character from a string?
3. Write a Python program to split and join a string?
4. Write a Python to check if a given string is binary string or not?
5. Write a Python program to find uncommon words from two Strings?
6. Write a Python to find all duplicate characters in string?
7. Write a Python Program to check if a string contains any special character?

1. Python program to find words which are greater than given length k:

python

```
def find_long_words(str, k):
    words = str.split()
    long_words = []
    for word in words:
        if len(word) > k:
            long_words.append(word)
    return long_words

# example usage
sentence = "The quick brown fox jumps over the lazy dog"
long_words = find_long_words(sentence, 4)
print(long_words) # ['quick', 'brown', 'jumps']
```

2. Python program for removing i-th character from a string:

python

```
def remove_char(str, i):
    left_part = str[:i]
    right_part = str[i+1:]
    return left_part + right_part

# example usage
string = "Hello World"
new_string = remove_char(string, 3)
print(new_string) # "Helo World"
```

3. Python program to split and join a string:

python

```
def split_and_join(str, delimiter=" "):
    words = str.split(delimiter)
    new_str = "-".join(words)
```

```
        return new_str

# example usage
string = "The quick brown fox"
new_string = split_and_join(string, " ")
print(new_string) # "The-quick-brown-fox"
```

4. Python program to check if a given string is binary string or not:

```
python
def is_binary(str):
    for char in str:
        if char != "0" and char != "1":
            return False
    return True

# example usage
binary_string = "101010"
non_binary_string = "12345"
print(is_binary(binary_string)) # True
print(is_binary(non_binary_string)) # False
```

5. Python program to find uncommon words from two strings:

```
python
def uncommon_words(str1, str2):
    words1 = set(str1.split())
    words2 = set(str2.split())
    uncommon_words = words1.symmetric_difference(words2)
    return uncommon_words

# example usage
string1 = "The quick brown fox"
string2 = "The lazy dog"
uncommon = uncommon_words(string1, string2)
print(uncommon) # {'quick', 'brown', 'lazy', 'dog'}
```

6. Python program to find all duplicate characters in a string:

```
python
def find_duplicates(str):
```

```

    duplicates = []
    for char in str:
        if str.count(char) > 1 and char not in duplicates:
            duplicates.append(char)
    return duplicates

# example usage
string = "Hello World"
dup_chars = find_duplicates(string)
print(dup_chars) # ['l', 'o']

```

7. Python program to check if a string contains any special character:

```

python
import re

def has_special_chars(str):
    regex = re.compile('[@_!#$%^&*()<>?/\|}{~:]') # special
characters to look for
    return bool(regex.search(str))

# example usage
string1 = "Hello World"
string2 = "Hello@World"
print(has_special_chars(string1)) # False
print(has_special_chars(string2)) # True

```