1) #to print the pattern

n=5;

for i in range(n):

for j in range(i):

print ('\* ', end="")

print('')

for i in range(n,5):

for j in range(i):

print('\* ', end="")

print('')

O/p:

\*

\* \*

\* \* \*

\* \* \* \*

2) #to print 0-6 except 3 and 6

for x in range(6):

if (x == 3 or x==6):

continue

print(x,end=' ')

print("\n")

O/p:

0 1 2 4 5

3) #to find the string length

def string\_length(str1):

count = 0

for char in str1:

count += 1

return count

print(string\_length('python programming'))

O/p:18

4) # to calculate the character frequency

def char\_frequency(str1):

dict = {}

for n in str1:

keys = dict.keys()

if n in keys:

dict[n] += 1

else:

dict[n] = 1

return dict

print(char\_frequency('google.com'))

O/p:{'g': 2, 'o': 3, 'l': 1, 'e': 1, '.': 1, 'c': 1, 'm': 1}

5) #to get a single string from two given strings

def chars\_mix\_up(a, b):

new\_a = b[:2] + a[2:]

new\_b = a[:2] + b[2:]

return new\_a + ' ' + new\_b

print(chars\_mix\_up('abc', 'xyz'))

O/p:xyc abz

6)#displays in upper and lower casses

user\_input = input("What's your favourite language? ")

print("My favourite language is ", user\_input.upper())

print("My favourite language is ", user\_input.lower())

O/p:What's your favourite language? english

My favourite language is ENGLISH

My favourite language is english