**Example 1. Check whether a number is a prime number**

number = int(input("Please input number"))

is\_prime = True

*# Process*

for i in range(2,number):

if number % i == 0 :

is\_prime = False

break

*# Output*

if is\_prime == True:

print("{0} is a prime number".format(number))

else:

print("{0} is not a prime number".format(number))

**Example 2. Check whether a list is sorted or not. If sorted, print “sorted”. If not, sort the list**

enter\_list = input("Please enter your list, separated by space")

new\_list = enter\_list.strip().split(*sep*=" ")

*# list ko ro sort chua*

numbers =[]

*# final list*

sorted\_list = []

length = len(new\_list)

*# chuyen list sang int*

for item in new\_list:

numbers.append(int(item))

*# Solution*

print(numbers)

is\_sorted = True

for i in range(len(numbers)-1):

if numbers[i] > numbers[i+1]:

is\_sorted = False

break

if is\_sorted:

print("Your sequence is sorted")

else:

print("Your sequence is not sorted")

print()

for j in range(0,len(numbers)):

min\_number = min(numbers)

position = numbers.index(min\_number)

del numbers[position]

sorted\_list.append(min\_number)

print("After sorted: ",sorted\_list)

**Example 3. Login 3 times**

*# Solution*

print("Hi there is a superuser gateway")

count = 0

while True:

user\_name = input("Username")

if user\_name == "c4e":

password = input("Password: ")

if password == "codethechange":

print("welcome")

break

else:

print("password incorrect")

else:

print("You are not a superuser")

count += 1

if count == 3:

print("You failed to login 3 times, go away")

break

**Example 4. Control the while loop**

Count = 0

Loop = True

while loop:

if count >= 7:

loop = False

else:

Run the program

count += 1

while loop:

print("Running")

count += 1

if count ==5:

loop = False

**Example 5.**

n = int(input("Please input the number"))

for i in range(n):

print(n - i)

Example 6.

for i in range(3):

for j in range(5):

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

print()