# import modules

import string

import random

# store all characters in lists

s1 = list(string.ascii\_lowercase)

s2 = list(string.ascii\_uppercase)

s3 = list(string.digits)

s4 = list(string.punctuation)

# Ask user about the number of characters

user\_input = input("How many characters do you want in your password? ")

# check this input is it number? is it more than 8?

while True:

try:

characters\_number = int(user\_input)

if characters\_number < 8:

print("Your number should be at least 8.")

user\_input = input("Please, Enter your number again: ")

else:

break

except:

print("Please, Enter numbers only.")

user\_input = input("How many characters do you want in your password? ")

# shuffle all lists

random.shuffle(s1)

random.shuffle(s2)

random.shuffle(s3)

random.shuffle(s4)

# calculate 30% & 20% of number of characters

part1 = round(characters\_number \* (30/100))

part2 = round(characters\_number \* (20/100))

# generation of the password (60% letters and 40% digits & punctuations)

result = []

for x in range(part1):

result.append(s1[x])

result.append(s2[x])

for x in range(part2):

result.append(s3[x])

result.append(s4[x])

# shuffle result

random.shuffle(result)

# join result

password = "".join(result)

print("Strong Password: ", password)