1. قم بعمل برنامج يولد كلمة مرور قوية بشكل عشوائي، بحيث تحتوي على حروف وأرقام ورموز مميزة، ويحدد المستخدم طول كلمة المرور المرغوب به.

Make a program that generate strong random password containing letters, numbers, and punctuations, with the user desired length.



إذا لم توفق للوصول للحل يمكنك السعي مرة أخرى بمساعدة الخطوات التالية

```
# 1. Write a program that generates a random password of a given length.

# get the desired password length

# Initialize the password string

# Loop until the password string has the desired length

# Add a random character from a set of letters, digits, and punctuation

# Print the generated password
```



```
import random
import string

# get the desired password length
password_length = int(input("Enter the desired password length: "))

# Initialize the password string
password = ""

# Loop until the password string has the desired length
while len(password) < password_length:

# Add a random character from a set of letters, digits, and punctuation
characters = string.ascii_letters + string.digits + string.punctuation
random_character = random.choice(characters)
password += random_character

# Print the generated password
print(f"Generated password: {password}")</pre>
```



2. قم بعمل برنامج يولد كلمة مرور قوية بشكل عشوائي، بحيث تحتوي على حروف Capital فقط وأرقام ورموز مميزة، ويحدد المستخدم طول كلمة المرور المرغوب به.

Make a program that generate strong random password containing **big letters**, numbers, and punctuations, with the user desired length.



إذا لم توفق للوصول للحل يمكنك السعي مرة أخرى بمساعدة الخطوات التالية

```
# 1. Write a program that generates a random password of a given length.

# get the desired password length

# Initialize the password string

# Loop until the password string has the desired length

# Add a random character from a set of letters, digits, and punctuation

# Print the generated password
```



```
import random
import string

# get the desired password length
password_length = int(input("Enter the desired password length: "))

# Initialize the password string
password = ""

# Loop until the password string has the desired length
while len(password) < password_length:

# Add a random character from a set of letters, digits, and punctuation
characters = string.ascii_uppercase + string.digits + string.punctuation
random_character = random.choice(characters)
password += random_character

# Print the generated password
print(f"Generated password: {password}")</pre>
```



3. قم بعمل برنامج يولد كلمة مرور قوية بشكل عشوائي، بحيث تحتوي على حروف وأرقام ورموز مميزة، ويكون على ويحدد المستخدم طول كلمة المرور المرغوب به، ويكون على الأقل نصفها يتكون من حروف.

Make a program that generate strong random password containing letters, numbers, and punctuations, with at least half of it are letters, with the user desired length.



إذا لم توفق للوصول للحل يمكنك السعي مرة أخرى بمساعدة الخطوات التالية

```
# Get the desired password length from the user

# Define the characters that can be used in the password

# Define the number of letters in the password

# we add 1 if the length is odd

# Add the letters to the password

# Add the other characters to the password

# Shuffle the password

# Convert the password to a string

# Print the generated password
```



```
import random
import string
# Get the desired password length from the user
length = int(input("Enter the desired password length: "))
# Define the characters that can be used in the password
characters = string.ascii_letters + string.digits + string.punctuation
# Define the number of letters in the password
letter_count = length // 2 + length % 2 # we add 1 if the length is odd
# Generate the password
password = []
# Add the letters to the password
i = 0
while i < letter_count:</pre>
    password.append(random.choice(string.ascii_letters))
    i += 1
while len(password) < length:</pre>
    password.append(random.choice(characters))
# Shuffle the password
random.shuffle(password)
# Convert the password to a string
password = "".join(password)
# Print the generated password
print(f"Generated password: {(password)}")
```

