import random

import string

def generate\_password(length=12):

if length < 4:

raise ValueError("Password length should be at least 4 characters")

uppercase = string.ascii\_uppercase

lowercase = string.ascii\_lowercase

digits = string.digits

symbols = string.punctuation

password = [

random.choice(uppercase),

random.choice(lowercase),

random.choice(digits),

random.choice(symbols)

]

all\_chars = uppercase + lowercase + digits + symbols

password += random.choices(all\_chars, k=length - 4)

random.shuffle(password)

return ''.join(password)

print("Generated Password:", generate\_password(12))