**Project: Password Generator**

**Details:**

Your task is to design and build a Python program that generates strong, secure passwords. These passwords should meet modern security standards and be suitable for various applications.

**Requirements:**

- Create a Python script that generates random passwords.

- Ensure the passwords are a mix of uppercase and lowercase letters, numbers, and special characters.

- Allow users to specify the length and number of passwords to generate.

Pro Tips:

- Research best practices for password security.

- Utilize Python's random library for generating random characters.

- Provide clear user instructions within your script.

**Solution:**

**import random**

**import string**

**def generate\_password(length):**

**characters = string.ascii\_letters + string.digits + string.punctuation**

**password = ''.join(random.choice(characters) for \_ in range(length))**

**return password**

**def main():**

**print("Welcome to the Password Generator!")**

**try:**

**password\_length = int(input("Enter the length of the password: "))**

**if password\_length < 8:**

**print("Password length should be at least 8 characters.")**

**return**

**num\_passwords = int(input("Enter the number of passwords to generate: "))**

**print("Generating passwords...")**

**passwords = [generate\_password(password\_length) for \_ in range(num\_passwords)]**

**print("\nGenerated Passwords:")**

**for index, password in enumerate(passwords, start=1):**

**print(f"Password {index}: {password}")**

**except ValueError:**

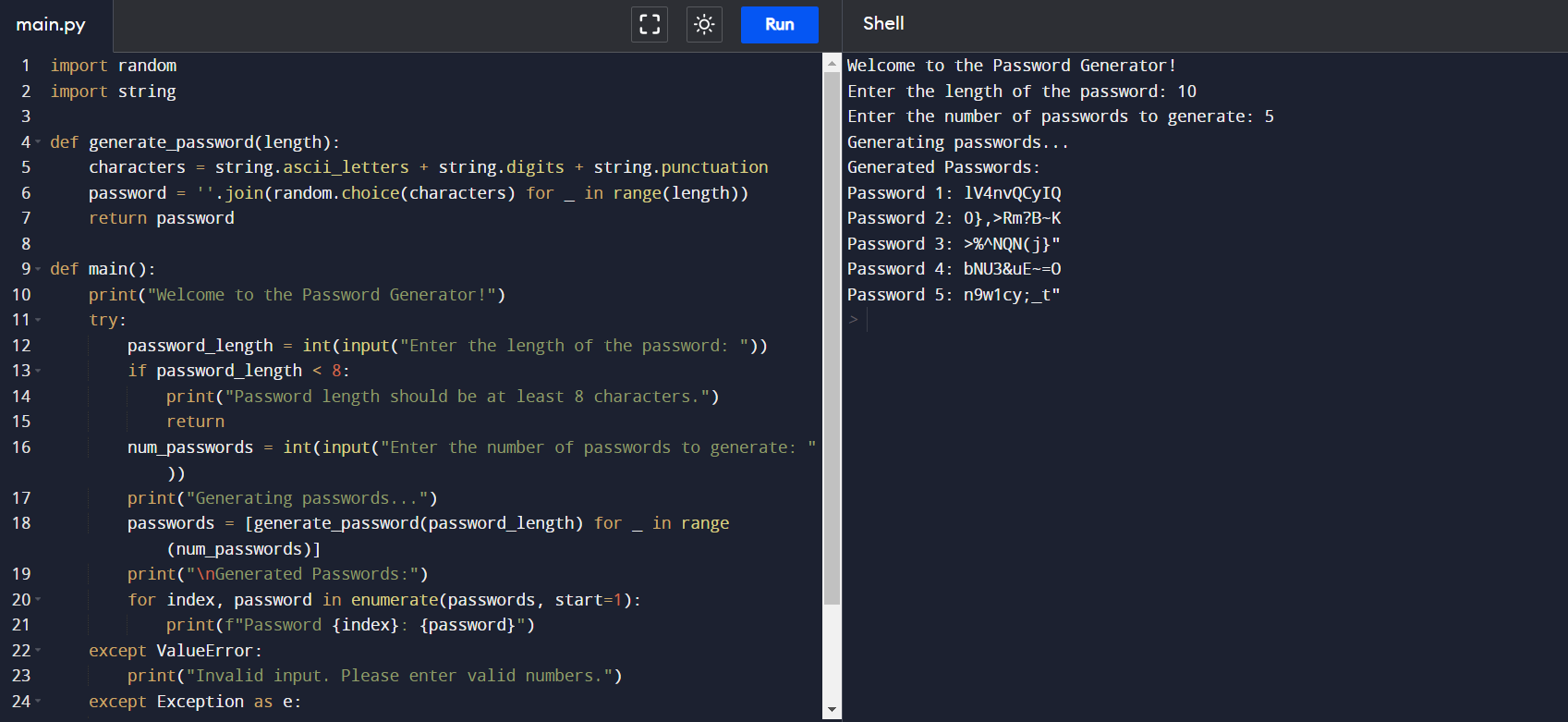
**print("Invalid input. Please enter valid numbers.")**

**except Exception as e:**

**print(f"An error occurred: {e}")**

**if \_\_name\_\_ == "\_\_main\_\_":**

**main()**

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