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import random

import string

def generate_password(length):

    # Define possible characters: lowercase, uppercase, digits, punctuation
    characters = string.ascii_letters + string.digits + string.punctuation

    # Use random.choices to pick characters
    password = ''.join(random.choices(characters, k=length))

    return password

def main():

    print("=== Password Generator ===")

    # Get desired password length from user
    try:

        length = int(input("Enter desired password length: "))

        if length <= 0:

            print("Please enter a positive number.")

            return

    except ValueError:

        print("Invalid input. Please enter a number.")

        return

    # Generate and display the password
    password = generate_password(length)

    print("\nGenerated Password:")
```

```
print(password)
```

```
if __name__ == "__main__":
```

```
    main()
```