Python mini projects

Password Generator

main.py

```python
import random
import string

def generate_password(length=12):
    characters = string.ascii_letters + string.digits + string.punctuation
    password = ''.join(random.choice(characters) for _ in range(length))
    return password
print("Generated Password:", generate_password(12))
```

input

```
Generated Password: =4Hu6w$!OSIj


...Program finished with exit code 0
Press ENTER to exit console.
```

To-do List (CLI)

main.py — Share — Run — Output

```python
while True:
    print("\n1. Add Task\n2. View Tasks\n3. Remove Task\n4.
        Exit")
    choice = input("Enter choice: ")
    if choice == "1":
        task = input("Enter task: ")
        tasks.append(task)
        print("Task added!")
    elif choice == "2":
        print("\nTo-Do List:")
        for idx, task in enumerate(tasks, 1):
            print(f"{idx}. {task}")
    elif choice == "3":
        task_num = int(input("Enter task number to remove: "))
        if 0 < task_num <= len(tasks):
            tasks.pop(task_num - 1)
            print("Task removed!")
    elif choice == "4":
        break
    else:
        print("Invalid choice. Try again.")

```

Output

```
1. Add Task
2. View Tasks
3. Remove Task
4. Exit
Enter choice: 1
Enter task: Assessment at 1pm
Task added!

1. Add Task
2. View Tasks
3. Remove Task
4. Exit
Enter choice: 2

To-Do List:
1. Assessment at 1pm

1. Add Task
2. View Tasks
3. Remove Task
```

Python mini projects

Weather App (API-based)

main.py

```python
import requests

API_KEY = "bd5e378503939ddaee76f12ad7a97608"
city = input("Enter city name: ")
url = f"http://api.openweathermap.org/data/2.5/weather?q={city}&appid={API_KEY}&units=metric"

response = requests.get(url).json()

if response["cod"] == 200:
    print(f"City: {response['name']}")
    print(f"Temperature: {response['main']['temp']}°C")
    print(f"Weather: {response['weather'][0]['description']}")
else:
    print("City not found!")
```

input

```
Enter city name: Paris
City: Paris
Temperature: 5.29°C
Weather: overcast clouds
```

Number Guessing Game

main.py

```python
import random

number = random.randint(1, 100)

while True:
    guess = int(input("Guess the number (1-100): "))
    if guess < number:
        print("Too low! Try again.")
    elif guess > number:
        print("Too high! Try again.")
    else:
        print("Congratulations! You guessed it right.")
        break
```

input

```
Guess the number (1-100): 4
Congratulations! You guessed it right.


...Program finished with exit code 0
Press ENTER to exit console.
```

Python mini projects

QR CODE GENERATOR