I- Python OOP

1. Write a Python program to create a class representing a circle. Include methods to calculate its area and perimeter.
2. Write a Python program to create a calculator class. Include methods for basic arithmetic operations.
3. Write a Python program to create a person class. Include attributes such as name, country, and date of birth. Implement a method to determine the person's age.

II- API Call With Python

In this task, you will make an API call using Python. Api_key and the website address will be provided to you. api_key= '010858a3a88847f1a4154131242207'

Web address= " http://api.weatherapi.com/v1/current.json"

Step 1: Import the request module

Step2: create a dictionary called 'params' with the following values. 'api'=api_key and 'q'=city_name

Step 3: make an HTTP request to the web address. When you do the request, don't forget to give params as the parameter.

Step 4: print the response content

Congratulations! You made a successful API call.

[optional]: create a python object to represent the incoming weather information.

III- Web Scrapping with python

In this task, you will scrape all the images on a website. Follow the following steps.

Step 1: Search 'Animals' on your browser.

Step 2: Click on images and you will see pictures.

Step 3: copy and paste the link at the top of the browser and give it to your code.

Step 4: use the request module to send an HTTP request to the link you copied.

Step 5: use the Beautiful Soup Module to search for img tags in the resulting response content

Step 6: pull out the link of the image from src of the image and make another HTTP request with the link. [you may need error handling for any potential error].

Step 7: write the content of the response to a file.

Congratulation! You have scrapped all the images on a page without manually saving them.

IV- SQLite3 in Python: Managing a School Database

1. Create the database: School

   Create a table called "students" with the following columns:

   - id: an integer primary key for each student
   - last_name: the student's last name
   - first_name: the student's first name
   - age: the student's age

2. Insert records (data)
3. Modify records
4. Perform a query to select data from the created table