Comprehensive Assignment

Problem Statement:

1. Implement below Program using **Java OOPs** concepts – Create below three classes and corresponding variables and methods

   Account (Base Class) – Include Interest as one variable and corresponding method to calculate Interest and add to the Account

   SavingsAccount (Derived Class) – Implement overridden methods of Account Class

   CurrentAccount (Derived Class) – Implement overridden methods of Account Class

2. Implement below program using **Python**. Create a **Python** class **Student** with two variables (**Name, Grade and Age**).
   Create a **display()** – To display Name, Grade and Age of an Object created using Student Class.
   Create another class **School** which inherits from **Student** class and crate another method SchoolStudentDisplay() – which displays Name, Grade and Age. Which object created using School class.

3. Launch a below browser in Firefox and verify **makemytrip** logo is present or not on the Page.
   Implement using Selenium with Web Driver concept
   https://www.makemytrip.com/

4. Launch a below browser in Chrome and click on **Flights** and Select **OneWay** to enter **FROM** and **TO** locations. ((Find the WebElements (Flights, OneWay, FROM and To Webelements using XPaths)
   https://www.makemytrip.com/
   Note: While Implementing above Program, write generic functions to interact with the browser.

5. Implement 3 and 4 Programs using TestNG Concepts and write it using @Test annotation.
   To launch the browser (Repeated code) maintain it in @BeforeMethod annotation
   Generate TestNG HTML Reports and find the Test Results

6. Create a Maven Project and implement all the programs in Maven Project and add all the necessary Jars and run all the programs using Maven Commands

7. Create a branch in GitHub and write all the programs in that branch and push the code into the same branch. Share the GitHub details to evaluate.

8. Create a collection in Postman and create positive and negative cases for below APIs. And use Http methods to get valid responses.

   GET: https://api.restful-api.dev/objects/5
   POST: https://api.restful-api.dev/objects
   PUT: https://api.restful-api.dev/objects/5
   DELETE: https://api.restful-api.dev/objects/7

Note: please note that Id will be auto generated so no need to send it while posting a new record.

   Verify the HTTP Status Codes, while running Positive and Negative Test Cases.

9. Create Thread Group in Test Plan using JMeter (Use below URL to send request and get the server response)

Use Assertions in JMeter to validate the Responses
Use Assertion Results (Use Listeners Concept)
https://www.makemytrip.com/

10. Launch a below browser in Chrome and verify **W3Schools** logo is present on the Page.
    Implement using Selenium with Web Driver concept (Implement it in Python and use pytest Fixtures)
    https://www.w3schools.com/