Object Oriented Programming

JAVA
WEEK-3

- 1. Create Book class with field name, id, price with a constructor and get methods for all fields. [hint: constructor will be Book(id, name, price), methods will be getID(), getName() and getPrice().]
- 2. Create a class as Student containing ID, Marks (array of 5). Now create methods for students to find the total and print the student score. Identify if the student is passed or failure with a minimum mark as 40M.
- 3. Write a menu driven program to do the following:
 - -To compare two strings
 - -To convert the uppercase character to lower and vice-versa
 - -To display whether an entered string is a substring of the other or not
 - -If the entered string is a substring of the other, replace it with "Hello"

Note: Use, Classes & Methods, String Handling, Raise Exception for invalid input

1. Create Book class with field name, id, price with a constructor and get methods for all fields. [hint: constructor will be Book(id, name, price), methods will be getID(), getName() and getPrice().]

Tasks:

- 1. Add author details and print author names in upper case.
- 2. Raise and catch exception when Book ID is not an integer.
- 3. If customer buys two or more books, the total price need to be displayed as "Total cost = Rs. xyz.ab"

2. Create a class as Student containing ID, Marks (array of 5). Now create methods for students to find the total and print the student score. Identify if the student is passed or failure with a minimum mark as 40M.

Tasks:

- 1. Raise and catch an exception when the marks entered is invalid.
- 2. If two students have same last_name, display their complete name and raise an exception as same last_name.
- 3. Convert the students name into ASCII Character.

- 3. Write a menu driven program to do the following:
 - i. To compare two strings
 - ii. To convert the uppercase character to lower and vice-versa
 - iii. To display whether an entered string is a substring of the other or not
 - vi. If the entered string is a substring of the other, replace it with "Hello"

Tasks:

- 1. Input your name as firstName and SecondName as atMIT.
- 2. Show all four cases.
- 3. Raise and catch an exception if the switch case entered is 5/v.
- 4. Take input to show the string match is True.

