Hands-on Assignments for Classes and Objects

Complete the below hands-on assignments before proceeding with the next Topic

No.	Hands-on Assignment	Topics Covered	Status
1	Create a class Box that uses a parameterized constructor to initialize the dimensions of a box.The dimensions of the Box are width, height, depth. The class should have a method that can return the volume of the box. Create an object of the Box class and test the functionalities.	Classes and Objects, Constructor	☐
2	Create a new class called Calculator with the following methods: 1. A static method called powerInt(int num1,int num2) This method should return num1 to the power num2. 2. A static method called powerDouble(double num1,int num2). This method should return num1 to the power num2. 3. Invoke both the methods and test the functionalities. Hint: Use Math.pow(double,double) to calculate the power.	Classes and Objects, Constructor, static	☐
3	Design a class that can be used by a health care professional to keep track of a patient's vital statistics. The following are the details. Name of the class - Patient Member Variables - patientName(String),height(double),width(double) Member Function - double computeBMI() The above method should compute the BMI and return the result. The formula for computation of BMI is weight (in kg) ÷ height*height(in metres). Create an object of the Patient class and check the results.	Classes and Objects, Constructor, static	☐