

## Class and objects

No.	Hands-on Assignment	Topics Covered	Status
1	<p>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.</p>	Classes and Objects, Constructor	<input checked="" type="checkbox"/>
2	<p>Create a new class called Calculator with the following methods:</p> <ol style="list-style-type: none"> <li>1. A static method called powerInt(int num1,int num2) This method should return num1 to the power num2.</li> <li>2. A static method called powerDouble(double num1,int num2). This method should return num1 to the power num2.</li> <li>3. Invoke both the methods and test the functionalities.</li> </ol> <p>Hint: Use Math.pow(double,double) to calculate the power.</p>	Classes and Objects, Constructor, static	<input checked="" type="checkbox"/>
3	<p>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.</p> <p>Name of the class - Patient</p> <p>Member Variables - patientName(String),height(double),width(double)</p> <p>Member Function - double computeBMI()</p> <p>The above method should compute the BMI and return the result. The formula for computation of BMI is <math>\text{weight (in kg)} \div \text{height}^2 \text{ (in metres)}</math>.</p> <p>Create an object of the Patient class and check the results.</p>	Classes and Objects, Constructor, static	