

The following exercises are related to the use of JavaScript.

1. Create a git repository for your answers to this problem sheet. Push the repository to GitHub. Make a commit and push it to GitHub after each exercise.
2. In this exercise you are required to create a class in JavaScript called BMI, that will take height in meters and weight in Kg as arguments and will calculate that persons Body Mass Index (BMI). To complete this exercise you will need to do the following:
 - (a) Create a new file in VS Code called bmi.js
 - (b) Create a class called BMI
 - i. Add a constructor to the class.
 - ii. The constructor should take two arguments (height & weight).
 - iii. The class should contain a method called calculateBMI.
 - iv. This method will return the individuals bmi using the formula:

```
let bmi = this.weight/(this.height**2);
```
 - (c) Create an instance of the class and invoke the calculateBMI method.
3. In this exercise, the aim is to implement a class called vehicle and a child class called Car. The Vehicle class should take make, model and year as arguments. It also should include a method that will write this information (make, model, year) to the console. The Car class will inherit from Vehicle class and also have a method that writes Number of Doors to the console.
 - (a) Create a new file in VS Code called cars.js
 - (b) Add a new Vehicle class.
 - i. The vehicle class should contain a constructor.
 - ii. The constructor should contain three arguments (make, model, year)
 - iii. Add a method to this class called Information that logs make model and year to the console.
 - iv. create an instance of this class and ensure that it is working properly.
 - (c) Add a new class called Cars that inherits from the Vehicle class.
 - i. The cars class should contain a constructor.
 - ii. The constructor should contain four arguments (make, model, year, doors)
 - iii. The constructor should invoke the parents class constructor and pass it three argument s for make model and year.
 - iv. The car class should contain a method called info Information.
 - v. This method will invoke the Information method on the parent class and also wirite the number of doors to the console.
 - (d) create an instance of this class and ensure that it is working properly.