The following exercises are related to the use of Typescript.

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 an array, and then create functions to add, remove and display the items in this array. To complete this exercise you will need to do the following:

   (a) Create an array of strings.

   (b) Create an addTask function:
      i. It receives a string as a parameter called task.
      ii. It adds the task to the array.
      iii. It prints a message in the console indicating the insertion.
      iv. It returns the number of elements in the array after the insertion.

   (c) Create a listAllTasks function:
      i. It iterates over all the tasks in the array.
      ii. It prints each array item in the console.

   (d) Create a deleteTask function:
      i. It receives a string as a parameter called task.
      ii. It removes that string from the array.
      iii. It prints in console a message indicating the deletion.
      iv. It returns the number of elements in the array after the deletion.

3. In this exercise, the aim is to implement the same functionality as exercise 2 using an interface instead. A class will be required to implement the interface. To complete this exercise you will need to do the following: Create an interface and add the following to it:

   (a) An array of strings.

   (b) An addTask function which:
      i. Recieves a string as a parameter.
      ii. Prints a message in the console indicating the insertion.
      iii. Returns the number of elements in the array after the insertion.

   (c) A listAllTasks function which:
      i. Prints in the console all the tasks of the list.

   (d) A deleteTask function which:
      i. Recieves a string as a parameter.
      ii. Prints a message in the console indicating the deletion.
      iii. Returns the number of elements in the array after the deletion.