* Provide Estimates for the following 5 Test Cases (15 mins)
  + Explaining your reasoning for your estimates
  + Prestashop Test Cases
* Code Challenge: Pick 1 Easy and 1 Challenging if they solve the easy one (20 mins)
  + Easy – Student Filtering
    - Using a List of Students
      * Name | Surname | Age | Course
    - Output a list of Students over the age of 14
    - Output a list of Students enrolled in Maths
    - Output a list of Students Names who are 18 years old and enrolled in History
  + Easy – Interpreting Data from a table
    - Using a DataTable of Payment Transactions
      * Date | Time | Amount |AccountPaid | Transaction Type
    - Output all Transactions completed today
    - Output a list of transactions with an amount over 5000
    - Create a new Object type with the following properties and then output a list of these items
      * Date
      * Time
      * Amount
      * Transaction Type
  + Easy
    - Using an item array with a maximum of 10 entries in it
    - Add the items in the array together and output the result
  + Challenging
    - Given a square matrix, calculate the absolute difference between the sums of its diagonals.
      * //1   6   3   9
      * //8   7   5   7
      * //2   4   5   3
      * //6   4   9   0
  + Challenging
    - There is a string, *s* of lowercase English letters that is repeated infinitely many times. Given an integer, *n* find and print the number of letter a's in the first letters of the infinite string.
    - You will be given 3 letters as a pattern
    - An integer for how many characters you need to check
    - Aba
    - “aba” \_ “abaabaabaabaabaabaabaaba…” 7 =5; 8 = 5a’s..15
      * Start with 7
      * Increase to 15
  + Challenging
    - Julius Caesar protected his confidential information by encrypting it using a cipher. [Caesar's cipher](https://en.wikipedia.org/wiki/Caesar_cipher) shifts each letter by a number of letters. If the shift takes you past the end of the alphabet, just rotate back to the front of the alphabet. In the case of a rotation by 3, w, x, y and z would map to z, a, b and c.
    - Given a Cipher value of 7 Decode the following message:
      * Fvb zvsclk pa!
    - Given a cipher of 11 encode the following message:
      * Im hiding my text
* SQL Test – All are mandatory – reduce (15 mins)
  + Easy – CRUD
    - Insert 3 Students into the Students table
    - Select all Courses which are offered for 3rd Years
    - Update History 102 and 103 to be in Year 1
    - Delete the course marked as ID 911
  + Challenging
    - Create a table using SQL
      * Map Students to Courses using IDs
      * CourseID | StudentID | Enrolled Date
    - Alter the table using SQL
      * Change the new Table to be Enrolled Year from Enrolled Date
    - Insert three records into new table
    - Use a SQL join on two tables
      * Write a select statement which includes all student and course information together
* Selenium (30 mins)
  + Easy – Interface/design a Page Object Model for two pages – explain their alternative
    - You can provide dummy locator values
      * <http://www.way2automation.com/angularjs-protractor/banking/#/customer>
      * http://www.way2automation.com/angularjs-protractor/banking/#/account
  + Medium – Solve Existing challenge
    - Tests are failing when running tests, please resolve
    - Implement the attached Page Object Model into a new project
* CI/CD (20 mins)
  + Given a url
  + Name of the test to run
  + Create a Jenkins Job
    - Parametised Job
  + Execute the job
* Solve 2 Unit Testing Challenges - Bonus
  + Easy
    - Simply Sum function
    - Takes an array
  + Challenging
    - A class with an interface
    - Requires Mocking
      * Mock the interface
      * Mock the functions
    - Suggest rewrite of line 28 to be more testable