Es6 lab day2

1) **Study new array api methods then create the following methods and apply it on this array var fruits = ["apple", "strawberry", "banana", "orange", "mango"]**

   a. test that every element in the given array is a string

   b. test that some of array elements starts with "a"

   c. generate new array filtered from the given array with only elements that starts with "b" or "s"

   d. generate new array each element of the new array contains a string declaring that you like the give fruit element

2) Using ES6 new Syntax & features:

Write a script to create different shapes (rectangle, square, circle) make all of them inherits from shape class.

   a. each shape contains two functions to calculate its area and its perimeter.
   b. Display the area and each object perimeter in your console by overriding toString().

   c. Create Class Property that counts numbers of created objects and Class method to retrieve it.

   d. Bonus: allow creation of only one square and one rectangle.
   e. Make your classes in an external file and import them in a module to create objects.

3. Create your box object that contains books objects, ensure that you can

   a. count # of books inside box.
   b. delete any of these books in box according to book name or type.
   c. create book object and add it to box object content property
   d. use toString() to tell its dimensions and how books are stored in it.

e. implement valueof() so that if there is more than one box object we can
   a. get total books in these boxes by adding the i.e. box1 has 5 books while box2 has 2 books, box1 + box2 should return 7

Note:

- there is no inheritance
- **box object has the following properties:** height, width, length, numOfBooks, volume, material, content.
- **The content property** contains an array of books.
- **book object has the following properties:** title, numofChapters, author, numofPages, publisher, numofCopies
- you can define any function needed for both box and book objects.