**Instructions**:

Question 1, 2, and 3 should be answered in the logic.js file

Answer 3 questions.

Question 4 is compulsory

1. **Background story**:

Palindrome is a word, phrase, or sequence that reads backwards as forwards.

*e.g madam, nurses run, Anna, Civic, Level, Noon, mom, refer.*

Each word is the same as the reverse of it.

**Question**:

write a function called **Palindrome checker** that takes in an array input and return *true* if any word

in the input array is a Palindrome else *false;*

Hint: an helper function has been given to you called **reverseString**.

**reverseString** is a function that helps you to reverse a word.

e.g reverseString("bag") = "gab"; // not a Palindrome

reverseString("refer") = "refer"; // it is a Palindrome

(20 marks)

2. **Background Story:**

A car is a four-wheeled road vehicle that is powered by an engine and

is able to carry a small number of people.

it has the following properties: 2 doors, 4 tryres, 2 rearSeats,

1 windshield, 2 sideMirrors.

**Question**:

i. Create an object called car to describe the car described above (10 marks)

ii. write a function called **carSideMirrorChecker** that take in a car object you created in “I” above

and return the number of *rearSeats* of the car object; (10 marks)

3**. Background story:**

In mathematics, average is the addition of all the numbers in a group and

then divided by the number of numbers in that group.

E.g

**Question**:

Write a function called **average** which takes an array of integers as parameter and return its average;

(20 marks)

4. **Background Story:**

**SpaceX** is a Nigerian tech company that build tech products. one of their many products is the bookmark-manager web app. It helps users stores their favorite websites for ease of future accessibility.

They hired an Indian developer to build it single handedly but the developer left for his country mid-way into the project and so the code is not completed.

You have been hired to take over the project and complete it.

Following are the list of tasks left to do as handed over by the Chief Technical Officer:

a. Link the index.html file to style.css (the stylesheet)

b. Link the index.html file to the script.js (the javascript file)

c. on line 32 of the index.html add an input element with a class of form-input and an id of website-name

d. on line 38 of the index.html add an input element with a class of form-input and an id of website-url

e. using DOM manipulation complete line 1 -7 of script.js where:

const modal = DOM element with an id of modal;

const modalShow = DOM element with an id of show-modal;

const modalClose = DOM element with an id of close-modal;

const bookmarkForm = DOM element with an id of bookmark-form;

const websiteNameEl = DOM element with an id of website-name;

const websiteUrl = DOM element with an id of website-url;

const bookmarksContainer = DOM element with an id of bookmarks-container

f. On line 9 of script.js create a variable called bookmark whose value is an empty array

g. On line 65 add bookmark to the bookmarks array

h. Using DOM manipulaton you will create new elements as described below:

i. on line 90 create a variable called item whose value is a "div" element created by the DOM

ii. on line 93 create a variable called closedIcon whose value is a "i" element created by the DOM

iii. on line 98 create a variable called linkInfo whose value is a "div" element created by the DOM

iv. on line 101 create a variable called favicon whose value is a "img" element created by the DOM

v. on line 105 create a variable called link whose value is a "a" element created by the DOM

**(20marks)**