1. Write a function in JavaScript to check if a number is even or odd using function expression and arrow function.

```
tests > TS EvenOddFunctionExp.spec.ts > ...
      const checkEvenOdd = function(number) {
        if (number % 2 === 0) {
          console.log(number + ' is Even');
          console.log(number + ' is Odd');
      checkEvenOdd(5);
      checkEvenOdd(8);
      const checkEvenOddArrow = (number) => {
        if (number % 2 === 0) {
          console.log(`${number} is Even`);
        } else {
          console.log(`${number} is Odd`);
      checkEvenOddArrow(3);
      checkEvenOddArrow(10);
                                  TERMINAL
                                            PORTS PLAYWRIGHT
PS C:\Users\aradh\Week2PlayWrightAssignment\tests> npx playwright test EvenOddFunctionExp.spec.ts
5 is Odd
8 is Even
3 is Odd
10 is Even
```

2. Write a Playwright test that opens salesforce website and navigate from login page to homepage and try to retrieve the title.

- 3. Identify the correct CSS selectors for the following elements: <input id="email" class="input-field" type="text" name="userEmail"> <button class="btn submit-btn" type="submit">Submit</button>
 - a) Select by ID → # email
 - b) Select by Class → . input-field
 - c) Select using attribute > input[type=" submit"]
- 4. Write a Playwright test to locate and click the "Submit" button using:
 - a) CSS selector

```
tests > TS ClickSubmit.spec.ts > ...

import test from "playwright/test";

test("LOGIN BUTTON",async({page})=>

{
    await page.goto("https://login.salesforce.com/?locale=in")
    await page.locator ( input[type=" submit"]')
    await page.click(".button.rd.wide.primary")
    const pageTitle= await page.title()
    console.log(pageTitle)
    await page.waitForTimeout(5000)

// input class="button r4 wide primary" type="submit" id="Login" name="Login" value="Log In" fdprocessedid="so3d2">

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS PLAYWRIGHT

PS C:\Users\aradh\week2PlayWrightAssignment\tests> npx playwright test ClickSubmit.spec.ts

Running 1 test using 1 worker

/ 1 ClickSubmit.spec.ts:3:9 > LOGIN BUTTON (6.8s)

Login | Salesforce

1 passed (7.8s)

PS C:\Users\aradh\week2PlayWrightAssignment\tests> |
```

- 1. Explore config file by changing the
 - a. fullparallel,
 - b. worker,
 - c. projects.

```
TS playwright.configits

TS demo.spec.ts × TS LaunchSepBrowsersConfiglevelspects

tests > TS demo.spec.ts > ② test(Launch indigo in firefox) callback

import { test } from '@playwright/test';

import { test } from '@playwright/test';

import { test } from '@playwright/test';

test('Launch easytrip in Edge', async ({page,baseURL})) => {

test.skip(test.info().project.name!=='chromium-edge')

await page.goto("https://www.easemytrip.com/");

console.log('--- easytrip (Edge) ---');

console.log(await page.url());

};

test('Launch makemytrip in chrome', async ([page,baseURL})) => {

test.skip(test.info().project.name!=='chromium-edge')

await page.goto("https://www.makemytrip.com/");

console.log('--- makemytrip (chrome) ---');

test.skip(test.info().project.name!=='chromium-edge')

await page.goto("https://www.makemytrip.com/");

console.log('--- makemytrip (chrome) ---');

console.log('--- makemytrip (chrome) ---');

test.skip(test.info().project.name!=='chromium-edge')

await page.goto("https://www.makemytrip.com/");

console.log('--- makemytrip (chrome) ---');

console.log('--- makemytrip (chrome) ---');

test.skip(test.info().project.name!=='firefox')

await page.goto("https://www.makemytrip.com/");

console.log('--- makemytrip (chrome) ---');

test.skip(test.info().project.name!=='firefox')

await page.goto("https://www.makemytrip.com/");

console.log(omait page.title());

console.log(mait page.title());

console.log(wait page.title());

console.log(wait page.title());

console.log(wait page.title());

console.log(wait page.title());

console.log(wait page.title());

conso
```

1(a)FullyParallel=false

1(a)FullyParallel=false

```
TS playwright.config.ts > 🔎 default > 🔑 fullyParallel
     export default defineConfig({
      fullyParallel: true,
       forbidOnly: !!process.env.CI,
       retries: process.env.CI ? 2 : 0,
       workers: process.env.CI ? 1 :undefined,
       reporter: [['html',{open:'always'}]],
       timeout: 90 * 1000,
         trace: 'on-first-retry',
         video:'on'.
         OUTPUT DEBUG CONSOLE TERMINAL PORTS PLAYWRIGHT
PS C:\Users\aradh\Week2PlayWrightAssignment\tests> npx playwright test LaunchSepBrowsersConfigLevel.spec.ts demo.spec.ts
Running 6 tests using 2 workers
    6 demo.spec.ts:17:5 > Launch indigo in firefox
 6 skipped
```

```
LaunchSepBrowsersConfigLevel.spec.ts
              demo.spec.ts
              ("https://www.easemytrip.com/");
                                                                                                                                  ("https://www.redbus.in/");
Edge
                                                                                                                                                                                                                                           Edge
                                                                                                                                  ("https://www.flipkart.com/");
                                                                                                                                                                                                                                           firefox
chrome
            ("https://www.makemytrip.com/");
             ("https://www.goindigo.in/");
                                                                                                                                  ("https://www.amazon.com/");
firefox
                                                                                                                                                                                                                                           chrome
              Tests within a file run sequentially, but two files run in parallel (in separate workers). Worker assignment depends on which worker becomes free first (dynamic).
                                                      fullyparallel=false
                                                                                                                                                                     fullyparallel=true
          S C:\Users\aradh\Week2PlayWrightAssignment\tests> npx playwright test LaunchSepBrowsersConfigLevel.spec.ts demo.spec.ts
                                                                                                                                   PS C:\Users\aradh\week2PlaywrightAssignment\tests> npx playwright test LaunchSep@rowsersConfigLevel.spec.ts demo.spec.ts
          tunning 6 tests using 2 workers
                                                                                                                                    Running 6 tests using 2 workers
             4 LaunchSepBrowsersConfigLevel.spec.ts:10:5 > Launch Flipkart in firefox 5 demo.spec.ts:17:5 > Launch indigo in firefox
                                                                                                                                       4 LaunchSeptronsersConfiguevel.spec.ts:18:5 > Launch Flipkart in firefox
5 LaunchSeptronsersConfiguevel.spec.ts:17:5 > Launch amazon in chrome
6 demo.spec.ts:17:5 > Launch indigo in firefox
```

1(b)Workers

CLI always overrides config.

```
export default defineConfig({
          testDir: './tests',
/* Run tests in files in parallel */
         fullyParallel: true,
         forbidOnly: !!process.env.CI,
         retries: process.env.CI ? 3 : 0,
         ^{\circ}_{\circ}/^{st} Opt out of parallel tests on CI. ^{st}/
         workers: process.env.CI ? 2 :undefined,
/* Renorter to use See https://nlavwright.dev/docs/test-renorters */
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS PLAYWRIGHT
6 skipped
PS C:\Users\aradh\week2PlayWrightAssignment\tests> npx playwright test LaunchSepBrowsersConfigLevel.spec.ts demo.spec.ts demo1.spec.ts
Running 9 tests using
     1 dem01.spec.ts:3:5 > Test 1 - RedBus (3.1s)
Test 1 started
     4 demo.spec.ts:10:5 > Launch makemytrip in chrome
5 LaunchSepBrowsersConfigLevel.spec.ts:10:5 > Launch Flipkart in firefox
6 demo.spec.ts:17:5 > Launch indigo in firefox
Test 1 finished

√ 8 dem01.spec.ts:9:5 → Test 2 - Flipkart (3.1s)

Test 2 started
Test 2 finished

√ 9 dem01.spec.ts:15:5 → Test 3 - Amazon (3.1s)

Test 3 started
Test 3 finished
  6 skipped
```

1@Projects

npx playwright test --config=../playwright.config.ts --project=chromium-edge

```
S playwright.config.ts >
       export default defineConfig({
          projects: [
              name: 'chromium-edge',
               channel:'msedge',
baseURL:'https://www.redbus.in/',},
testMatch:'LaunchSepBrowsersConfigLevel.spec.ts',
              name: 'chromium-chrome',
               channel:'chrome',
baseURL:'https://www.amazon.in/',},
testMatch:'LaunchSepBrowsersConfigLevel.spec.ts',
            name: 'firefox',
use: { ...devices['Desktop Firefox'],
           OUTPUT DEBUG CONSOLE TERMINAL PORTS PLAYWRIGHT
PS C:\Users\aradh\week2PlayWrightAssignment\tests> npx playwright test --config=../playwright.config.ts --project=chromium-edge
Running 3 tests using 3 workers
[chromium-edge] > LaunchSepBrowsersConfigLevel.spec.ts:3:5 > Launch Red Bus in Edge
--- Red Bus (Edge) ---
Bus Ticket Booking Online at Cheapest Price with Top Bus Operators- redBus
https://www.redbus.in/
  2 skipped
1 passed (6.3s)
    Q
                                                                                                  All 1 Passed 1 Failed 0 Flaky 0 Skipped 2
    Project: chromium-edge
                                                                                                                          4/7/2025, 1:27:36 pm Total time: 6.3s
    \lor \quad Launch Sep Browsers Config Level. spec.ts

✓ Launch Red Bus in Edge

                                                                                                                                                            4.4s
        LaunchSepBrowsersConfigLevel.spec.ts:3
```

npx playwright test --config=../playwright.config.ts --project=firefox



```
TS playwright.config.ts > 🔎 default > 🔑 projects
      export default defineConfig({
          projects: [
              name: 'chromium-chrome',
              channel:'chrome',
baseURL:'https://www.amazon.in/'},
testMatch:'LaunchSepBrowsersConfigLevel.spec.ts',
             name: 'chromium-chrome',
             use:
              channel:'chrome',
baseURL:'https://www.makemytrip.com/'},
               testMatch: 'demo.spec.ts',
           OUTPUT DEBUG CONSOLE TERMINAL PORTS PLAYWRIGHT
Serving HTML report at http://localhost:9323. Press Ctrl+C to quit.
PS C:\Users\aradh\Week2PlayWrightAssignment\tests> npx playwright test --config=../playwright.config.ts --project=chromium-chrome
Running 6 tests using 4 workers
[chromium-chrome] > LaunchSepBrowsersConfigLevel.spec.ts:17:5 > Launch amazon in chrome
 -- Amazon (chrome) --
Amazon.com. Spend less. Smile more.
https://www.amazon.com/
[chromium-chrome] > demo.spec.ts:10:5 > Launch makemytrip in chrome
--- makemytrip (chrome) ---
MakeMyTrip - #1 Travel Website 50% OFF on Hotels, Flights & Holiday
https://www.makemytrip.com/
  4 skipped
2 passed (56.8s)
 Q
                                                                                              All 2 Passed 2 Failed 0 Flaky 0 Skipped 4
                                                                                                                   4/7/2025, 1:35:09 pm Total time: 56.8s
  \lor Launch Sep Browsers Config Level. spec.ts
   54.4s
      LaunchSepBrowsersConfigLevel.spec.ts:17
  ∨ demo.spec.ts

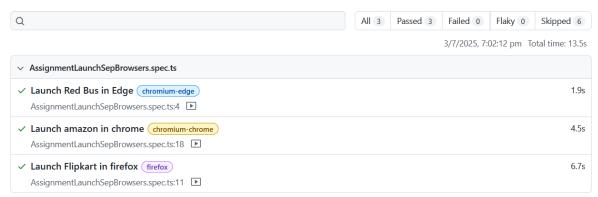
✓ Launch makemytrip in chrome (chromium-chrome)

                                                                                                                                                    52.6s
      demo.spec.ts:10
```

- 2. Explore on the priority of the test execution while using a page fixture and manually launching the browser in terms of
- a. script level
- b. config level
- c. CLI Command Line Interface -Terminal

2(b). Prority of test execution while using page fixture-Config level -Sequential

```
tests > TS AssignmentLaunchSepBrowsers.spec.ts > ...
       import { chromium, firefox } from '@playwright/test';
test('Launch Red Bus in Edge', async ({page,baseURL}) => {
         test.skip(test.info().project.name!=='chromium-edge'
         await page.goto("https://www.redbus.in/");
         console.log('--- Red Bus (Edge) ---');
         console.log(await page.title());
         console.log(page.url());
       test('Launch Flipkart in firefox', async ({page,baseURL}) => {
         test.skip(test.info().project.name!=='firefox')
         await page.goto("https://www.flipkart.com/");
         console.log('--- Flipkart (firefox) ---');
         console.log(await page.title());
         console.log(page.url());
       });
       test('Launch amazon in chrome', async ({page,baseURL}) => {
         test.skip(test.info().project.name!=='chromium-chrome')
         await page.goto("https://www.amazon.com/");
         console.log('--- Amazon (chrome) ---');
         console.log(await page.title());
         console.log(page.url());
                                   TERMINAL PORTS
[chromium-edge] > tests\AssignmentLaunchSepBrowsers.spec.ts:4:5 > Launch Red Bus in Edge
 -- Red Bus (Edge)
Bus Ticket Booking Online at Cheapest Price with Top Bus Operators- redBus
https://www.redbus.in/
[chromium-chrome] > tests\AssignmentLaunchSepBrowsers.spec.ts:18:5 > Launch amazon in chrome
 --- Amazon (chrome) ---
Amazon.com. Spend less. Smile more.
https://www.amazon.com/
[firefox] > tests\AssignmentLaunchSepBrowsers.spec.ts:11:5 > Launch Flipkart in firefox
    Flipkart (firefox) -
Online Shopping Site for Mobiles, Electronics, Furniture, Grocery, Lifestyle, Books & More. Best Offers!
https://www.flipkart.com/
  6 skipped
3 passed (13.5s)
```



```
TS AssignmentLaunchSepBrowsers.spec.ts
 playwright.config.ts X
rs playwright.config.ts > 🙉 default > 🔑 projects > 🔑 testMatch
       export default defineConfig({
         projects: [
             name: 'chromium-edge',
             use:
              channel:'msedge',
baseURL:'https://www.redbus.in/',},
               testMatch: 'AssignmentLaunchSepBrowsers.spec.ts',
             name: 'chromium-chrome',
             use:
              channel:'chrome',
baseURL:'https://www.amazon.in/',},
               testMatch: 'AssignmentLaunchSepBrowsers.spec.ts',
57
            name: 'firefox',
use: { ...devices['Desktop Firefox'],
             baseURL: https://www.flipkart.com/',
},testMatch: 'AssignmentLaunchSepBrowsers.spec.ts',
```

2(a). Priority of test execution -Script level - sequential

```
tests > TS LaunchSepBrowsersScriptLevel.spec.ts > ♦ <function>
       import { chromium, firefox } from 'playwright';
         const edgeBrowser = await chromium.launch({ channel: 'msedge', headless: false });
         const edgePage = await edgeBrowser.newPage();
         await edgePage.goto('https://www.redbus.in/');
         console.log('--- Red Bus (Edge) ---');
         console.log(await edgePage.title());
         console.log(edgePage.url());
         await edgeBrowser.close();
         const firefoxBrowser = await firefox.launch({ headless: false });
         const firefoxPage = await firefoxBrowser.newPage();
         await firefoxPage.goto('https://www.flipkart.com/');
         console.log('--- Flipkart (Firefox) ---');
         console.log(await firefoxPage.title());
         console.log(firefoxPage.url());
         await firefoxBrowser.close();
         // Amazon in Chrome
         const chromeBrowser = await chromium.launch({ channel: 'chrome', headless: false });
         const chromePage = await chromeBrowser.newPage();
         await chromePage.goto('https://www.amazon.in/');
         console.log('--- Amazon (Chrome) ---');
         console.log(await chromePage.title());
         console.log(chromePage.url());
         await chromeBrowser.close();
      })();
```

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS PLAYWRIGHT

PS C:\Users\aradh\Week2PlayWrightAssignment> npx tsx ./tests/LaunchSepBrowsersScriptLevel.spec.ts
--- Red Bus (Edge) ---
Bus Ticket Booking Online at Cheapest Price with Top Bus Operators- redBus
https://www.redbus.in/
--- Flipkart (Firefox) ---
Online Shopping Site for Mobiles, Electronics, Furniture, Grocery, Lifestyle, Books & More. Best Offers!
https://www.flipkart.com/
--- Amazon (Chrome) ---
Online Shopping site in India: Shop Online for Mobiles, Books, Watches, Shoes and More - Amazon.in
https://www.amazon.in/
PS C:\Users\aradh\Week2PlayWrightAssignment>
```

2©. Priority of test execution -CLI command line interface it overrides config file workers.

```
TS playwright.config.ts X
TS playwright.config.ts > [9] default
       export default defineConfig({

¬testDir: './tests',

 16
         fullyParallel: true,
         forbidOnly: !!process.env.CI,
         retries: process.env.CI ? 2 : 0,
                                    TERMINAL PORTS PLAYWRIGHT
PS C:\Users\aradh\Week2PlayWrightAssignment\tests> npx playwright test
Running 11 tests using 4 workers
--- Red Bus (Edge) ---
Bus Ticket Booking Online at Cheapest Price with Top Bus Operators- redBus
https://www.redbus.in/
     1 LaunchSepBrowsersConfigLevel.spec.ts:3:5 > Launch Red Bus in Edge
  ✓ 2 example.spec.ts:3:5 > has title (3.2s)

√ 4 dem01.spec.ts:3:5 → Test 1 - RedBus (3.2s)

Test 1 started

√ 9 example.spec.ts:10:5 > get started link (956ms)

Test 1 finished

√ 10 dem01.spec.ts:9:5 > Test 2 - Flipkart (3.1s)

Test 2 started
Test 2 finished
  ✓ 11 dem01.spec.ts:15:5 > Test 3 - Amazon (3.1s)
Test 3 started
Test 3 finished
  6 skipped
  5 passed (11.8s)
```