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## 1. What is Selenium..?

- It is a Open source tool for the Automation testing
  - It is used to do the Automation testing for Web based application
  - It supports different programming language like Java, Python C#
  - It supports different web browsers like Google Chrome, Opera-mini, Microsoft Edge
  - It can run at different Operating system like Window, Linux, Mac
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## 2. How to download the chrome driver..?

- Search chrome driver for selenium in the google chrome
  - Download the **chromedriver.exe** based our current chrome version
  - To know the current version of **chromedriver.exe**, Setting--> About Chrome --> Version name detail will available
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## 3. How to launch the Browser..?

```
System.setProperty("webdriver.chrome.driver","chromedriver.exe");
```

```
WebDriver driver=new ChromeDriver();
```

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## 3. How to maximize the browser...?

```
driver.manage().window().maximize();
```

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## 4. How to minimize the browser...?

```
driver.manage().window().minimize();
```

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## 5. What is sleep()..?

The sleep() is used to stop the execution of programme for the particular time.

```
Thread.sleep(4000);
```

- We should pass the time duration as argument to the sleep method.
  - We have to call the sleep() method from Thread class
  - The sleep() causes the **InterruptedException** exception
  - We should manually throws the Exception in the method name
  - Else we can handle it by using try-catch
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## 6. What is get()..?

The get() is used to hit the link in the browser.

```
driver.get("www.google.com");
```

We should pass the link value as argument in the method as String value.

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## 7. What is findElement()..?

- The findElement() method is used to find the single Web Element in the HTML webpage.
- We should pass the locators to the findElement() as a argument.

```
driver.findElement(By.locator("locator-value"));
```

```
driver.findElement(By.xpath("//*[@id=username]"))
```

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## 8. What is findElements()..?

- The findElements() method is used to find the multiple Web Element in the HTML webpage.
- We should pass the locators to the findElement() as a argument.

```
driver.findElement(By.locator("locator-value"));
```

```
driver.findElements(By.xpath("//*[@id=username]"))
```

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## 9. What are the different between findElement() and findElements()..?

### **findElement() method:**

- This command is used to access any single element on the web page
- It will return the object of the first matching element of the specified locator
- It will throw NoSuchElementException when it fails to identify the element

### **findElements() method:**

- This command is used to uniquely identify the list of web elements within the web page.
  - The usage of this method is very limited
  - If the element doesn't exist on the page then, then it will return value with an empty list
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## 10. What are the locators..?

- The locator is used to locate the web element in the HTML web page.
- The locator is classified into different types
  1. By ID
  2. By Name
  3. By Tag Name
  4. By Class name
  5. By Xpath

1. **By ID:** `driver.findElement(By.id("JournalDev"));`

2. **By Name:** `driver.findElement(By.name("JournalDev"));`

3. **By Tag Name:** `driver.findElement(By.tagName("JournalDev"));`

4. **By Class Name:** `driver.findElement(By.className("JournalDev"));`

5. **By Xpath:** `driver.findElement(By.xpath("JournalDev"));`

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