**What is the Main difference between Page Object Model and Page Factory in Selenium?**

**Why we need Pattern/Model?**

* To Reduce the code duplication
* To maintain of test cases

**Page Object Model (POM):**

* Its design pattern
* It's a design principle to manage the test cases and page objects separately.
* You can use data-driven, behaviour-driven, keyword-driven Frameworks with POM
* Helping us with code re-usability, code maintenance, object repository in the automation framework
* We define each Ul elements separately
* Object classes locators for each element of every web page
* Page Class has action methods to apply the selenium actions on Ul elements
* Page Object class that represents a web page and hold the functionality and members.

**Page Factory:**

* They are well optimized
* They are predefined library in selenium to find the web element on the page
* Its way to initialize the web elements you want to interact with within the page object when you create an instance of it.
* PF annotations use the attributes for specific locator types like id, name, class name, CSS, link text, partial link text, class-name, and XPath
* It provides annotations like @FindBy, @FindAll which locate webelement and return the WebElement instance for the same.
* Page factory also instantiate the page class instance