

### **1.) Explain why selenium is important in web scraping.**

- Selenium is an automation testing framework for web applications/websites which can also control the browser to navigate the website just like a human. Selenium uses a web-driver package that can take control of the browser and mimic user-oriented actions to trigger desired events.

### **2.) What's the difference between scraping images and scraping websites? Use an example to demonstrate your point.**

- Image scraping is a subset of the web scraping technology. While web scraping deals with all forms of web data extraction, image scraping only focuses on the media side – images, videos, audio, and so on.
- Web scraping is the process of using bots to extract content and data from a website. Unlike screen scraping, which only copies pixels displayed onscreen, web scraping extracts underlying HTML code and, with it, data stored in a database. The scraper can then replicate entire website content elsewhere.
- There is minor difference that Image scraping works on media content where as web scraping works on all the data.

### **3.) Explain how MongoDB indexes data.**

- MongoDB uses multikey indexes to index the content stored in arrays. If you index a field that holds an array value, MongoDB creates separate index entries for every element of the array. These multikey indexes allow queries to select documents that contain arrays by matching on element or elements of the arrays.

#### **4.) What is the significance of the SET modifier?**

- Set expressions are used to define the scope of a calculation. The central part of the set expression is the set modifier that specifies a selection. This is used to modify the user selection, or the selection in the set identifier, and the result defines a new scope for the calculation.

#### **5.) Explain the MongoDB aggregation framework.**

- The aggregation framework is a set of analytics tools within MongoDB that allows us to run various types of reports or analysis on documents in one or more collections. Based on the idea of a pipeline.