**Understanding** of the Problem Statement :

If I have to answer this in one sentence “**Develop a search engine considering three main factors i.e crawling, indexing and ranking** ” similar factors which google, yahoo use to provide the world’s best search engine.

Once I did the research I got the basic understanding of these factors

**Crawling** : It is one of the main factors where in google use google bots made up of millions of computers to crawl the websites. Pages are crawled based on the strengths of the websites.

**Indexing** : It is basically taking things in word order and provide the results that in which all documents the corresponding words are present. For eg. If u want to search for Sachin Tendulkar

|  |  |
| --- | --- |
| Sachin | Tendulkar |
| Doc 1 | Doc 2 |
| Doc 30 | Doc 20 |
| Doc 2 | Doc 30 |
| Doc 5 | Doc 7 |

From above fig we can get to know that in which all documents the word Sachin is present and in which all documents the word Tendulkar is present. Since we search for Sachin Tendulkar and it is present in Doc 2 and Doc 30 these documents are fetched and rest of them are ignored.

**Ranking** : Based on the indexed result again it is compared based on the strength of the websites the results are to be displayed in decreasing order of their strengths.

Based on the above factors we can get the strengths of the keywords which are best considered for search results and are stored in file storage to provide better results when users search for particular content in the search engine.