**Que\_1.Compare the top THREE results between Google and Bing for TEN queries that you have done recently. Write a report on which search engine did better on which queries (one paragraph each) and your overall view (a couple of paragraphs) of which search engine is better, by how much and why?**

**1.Query[current government schemes] -** For this query google gives the best result as compared to Bing .The reason is that google rank government official website on top of their ranking where we can explore the authentic and updated information about different schemes which is being executed by government for country’s development.But on the other hand Bing did not ranks government official website on their top of ranking.[[Google](https://drive.google.com/file/d/17Yy2H5JVpwqXZwtRJ63dy0OvTsL_ouUH/view?usp=drive_link) [Bing](https://drive.google.com/file/d/1mc0BHzewT6P6gb_zIROcnSJnQHwNsnDW/view?usp=drive_link)]

**2.Query[current government schemes] -** For this query also google gave the better result as compared to Bing as we can see google ranks list of online education platform in india on their top of ranking and also search output given by google is to the point and exact match for user query.But on the other hand Bing’s top result is not as per user query.[[Google](https://drive.google.com/file/d/1A1SE2MwOxIYcNsEwM_1Eeu8JrN4LuBht/view?usp=drive_link) [Bing](https://drive.google.com/file/d/1VkHKl4gDWTjAYllrUlJhfrfEwprRD3v9/view?usp=drive_link)]

**3.Query[latest bollywood movies] -** For this query Bing gives the best result as we can see Bing gave the series of very latest bollywood movies in pictorial form in top of their ranking but on the other hand google gives also the series of bollywood movies but a few are latest and a few are not.[[Google](https://drive.google.com/file/d/1-Zwdh0KDalQpKrE8EtxRs15ypdvGefiU/view?usp=drive_link) [Bing](https://drive.google.com/file/d/1pD9L9cQT59Jtqx1zbNyIFtfi1Q2z5u-U/view?usp=drive_link)]

**4.Query[best stocks to invest in 2024] -** As per me for this query google gives the relevant information which is best fit for user query .You can see that google is suggesting some companies like Reliance industries , TCS and Infosys on top of their ranking which is really a fundamentally strong stocks for current time.So in this case google is giving the reliable and authentic information.But on the other hand Bing is giving something else which is not to the point .[[Google](https://drive.google.com/file/d/1mxPEuMLrq_GSV8jCJI6VazGv14dwVe1S/view?usp=drive_link) [Bing](https://drive.google.com/file/d/1sME90QLEZzvtC_JPBQw03pv1XpCnzz_z/view?usp=drive_link)]

**5.Query[richest man in the world] -** for this query Bing gave the best result because it ranks the official website of forbes(a recognised institution at international level)at top of their ranking which is the authentic source of information.As we know Forbes keeps record of billionaire in the world.But on the other hand google ranks a website at top of their ranking which is not as authentic as forbes.[[Google](https://drive.google.com/file/d/1kSyAR8L1f0iUO3VibsHXyrDzS46Cil1p/view?usp=drive_link) [Bing](https://drive.google.com/file/d/1uf5GF4QzG2p_KaVIibxNndLFffDLkLTY/view?usp=drive_link)]

**6.Query[best brand of jewelry] -** for this query google gave the best and to the point output.As we can see in the image(In google drive) as per user query google simply gave the list of 10+ jewelry brand but on the other hand bing’s result is not to the point and also not clear readable but google’s output is readable.[[Google](https://drive.google.com/file/d/1w-cBv4Afs906rBBLmuRqu2CwON6BYx1m/view?usp=drive_link) [Bing](https://drive.google.com/file/d/1mrQVlVuVZy6Sb7QXtnh60dicoUhFfVRJ/view?usp=drive_link)]

**7.Query[best ipl player] -** for this query also google gave the best and authentic result with statistical data .Google ranks official website of Indian premier league on top of their ranking but on the other hand bing’s result did not provide any statistical data , also it did not ranks official website of Indian premier league on top of their ranking where we can find much authentic result as compared to other sources.[[Google](https://drive.google.com/file/d/1s94qYn3OgcHSHCdysULDOhCFhuBCvTrL/view?usp=drive_link)  [Bing](https://drive.google.com/file/d/1UDScHGQZpj8ywb0Ytg0EOKJjqIW22tbW/view?usp=drive_link)]

**8.Query[best laptop brand] -** for this query Bing gave the best search result as compared to google because Bing gave the list of popular brand with price range and picture on top of their ranking but on the other hand google simply ranks third party website on top of their ranking.[[Google](https://drive.google.com/file/d/1jyc2KMU4PbEzNESc4qQXcBZxMmY4iY1P/view?usp=drive_link) [Bing](https://drive.google.com/file/d/1vYuojfnQ_WA2eGl5DVwZWe8J0bklxKPe/view?usp=drive_link)]

**9.Query[best car] -** for this query google gave the more precise output as compared to Bing because as we can see in the image google ranks official website of carwale which is famous on top of their ranking.Additionally this website gives the complete information like latest brand,popularity and price range in a very structured manner. But on the other hand Bing ranks carwale official website at second position in their ranking.[[Google](https://drive.google.com/file/d/1dcHF3Qa9kj773YcmkYlf5XqSWgbTi4IG/view?usp=drive_link) [Bing](https://drive.google.com/file/d/1OK0v94nZVSqjh8crf7Q_h6IOhnMluCRc/view?usp=drive_link)]

**10.Query[best search engine] -** This is a very funny and observable query.For this query google gave the result that google is the best search engine in the world. But Bing is not giving the direct result on top of their ranking.[[Google](https://drive.google.com/file/d/1hg1j3AIIIcFci2zMYLDPNVmzmO6ih2le/view?usp=drive_link) [Bing](https://drive.google.com/file/d/1T9ZSZptsFeL3eUF7g3PqOeMekUcUERr4/view?usp=sharing)]

**Overall analysis -** Now considering the above 10 queries.We will make a decision that which search engine did better on an average.We will analyze mathematically and statistically..

So I have given the score to Google and Bing for corresponding queries in order to find the relative performance.1 indicates that a particular search engine did better ranking as compared to others..

| Query | Google(Score) | Bing(score) |
| --- | --- | --- |
| **current government schemes** | 1 | 0 |
| **current government schemes** | 1 | 0 |
| **latest bollywood movies** | 0 | 1 |
| **best stocks to invest in 2024** | 1 | 0 |
| **richest man in the world** | 0 | 1 |
| **best brand of jewelry** | 1 | 0 |
| **best ipl player** | 1 | 0 |
| **best laptop brand** | 0 | 1 |
| **best car** | 1 | 0 |
| **best search engine** | 1 | 0 |

Average[Google search engine] = 7/10 = 0.7

Average[Bing search engine] = 3/10 = 0.3

Hence mathematically we can see that google did better most of the time as compared to Bing.

**Que\_2 . List five web services or sites that you use that appear to use search, not including web search engines. Describe the role of search for that service. Also describe whether the search is based on a database or grep style of matching, or if the search is using some type of ranking.**

**1.Amazon (e-commerce platform):**

**Role of Search:** Amazon search to help users find products quickly within its vast inventory.

**Search Methodology:** Amazon's search is based on a combination of database matching and ranking. It involves matching user queries with product attributes and using algorithms to rank results based on relevance, popularity, and other factors.

**2.YouTube (video-sharing platform):**

**Role of Search:** YouTube utilizes search to help users discover videos and channels of interest.

**Search Methodology:** YouTube's search involves a combination of database matching and ranking. Video metadata, user engagement data, and other factors contribute to the ranking of search results.

**3.LinkedIn (professional networking platform):**

**Role of Search:** LinkedIn employs search to connect professionals with potential job opportunities, business contacts, and industry insights.

**Search Methodology:** LinkedIn's search is primarily database-driven. It involves matching user queries with profile information, job listings, and other data on the platform.

**4.WhatsApp (instant messaging app):**

**Role of Search:** WhatsApp uses search to help users find specific messages, contacts, or media within their chat history.

**Search Methodology:** WhatsApp's search is generally based on a database approach. It involves indexing and searching through the user's chat history, contacts, and media files. The app may prioritize recent messages and contacts, making it easier for users to find the information they are looking for quickly. The search results are often displayed chronologically.

**5.GitHub (code repository and collaboration platform):**

**Role of Search:** GitHub's search functionality aids developers in discovering and accessing code repositories, projects, and relevant code snippets.

**Search Methodology:** GitHub's search is based on a combination of database matching and ranking. It involves searching through code repositories, README files, and other project-related metadata to match user queries and rank results based on relevance and popularity.

In all these cases, the search functionality is a crucial component for users to efficiently navigate and find relevant information within the respective platforms. The methodologies may vary, but they often combine database matching with ranking algorithms to enhance the user experience.