# 27 Lecture - CS101

## Important Subjective

1. **What is the PageRank system and how does it work?**
   **Answer:** PageRank is a mathematical algorithm that assigns a numerical value to each webpage on the internet based on the number and quality of links pointing to that page. The more links a page has from other high-quality websites, the higher its PageRank score will be.

2. **How does Google use machine learning algorithms to improve its search results?**
   **Answer:** Google uses machine learning algorithms to analyze the search queries entered by users and the web pages that are returned as search results. Based on this analysis, the search engine can adjust its algorithms to provide better results for future searches.

3. **What is natural language processing (NLP) and how does Google use it?**
   **Answer:** Natural language processing (NLP) is a field of artificial intelligence that focuses on teaching computers to understand human language. Google's NLP algorithms are designed to analyze the words in a search query and interpret their meaning in context, allowing Google to provide more relevant search results.

4. **How does Google determine which web pages are most relevant to a particular search query?**
   **Answer:** Google uses a complex series of algorithms that take into account a wide range of factors, including the words in the query, the relevance of the web pages, and the quality and authority of the websites that host those pages.

5. **How does Google handle misspelled search queries?**
   **Answer:** Google uses a spell-checking algorithm to correct common spelling mistakes in search queries, allowing users to find relevant search results even if they have made a spelling error.

6. **How does Google determine the authority of a website?**
   **Answer:** Google uses a range of different factors to determine the authority of a website, including the number and quality of links pointing to that site, the quality of the content on the site, and the overall reputation of the website.

7. **How does Google handle duplicate content on the internet?**
   **Answer:** Google's algorithms are designed to detect duplicate content on the internet and to give preference to the original source of that content.

8. **How does Google determine the relevance of a web page to a particular search query?**
   **Answer:** Google's algorithms use a complex series of factors to determine the relevance of a web page to a particular search query, including the words on the page, the overall authority of the website, and the number and quality of other websites that link to that page.

9. **How does Google handle spam and low-quality websites?**
   **Answer:** Google has a range of different algorithms and techniques designed to detect and penalize spammy and low-quality websites, including manual reviews by human moderators.

10. **How does Google handle complex search queries that have multiple possible meanings?**
    **Answer:** Google uses natural language processing (NLP) algorithms to analyze the words in a complex search query and interpret their meaning in context, allowing the search engine to provide more relevant search results.