

**FORM 4**  
**UNIT 4 NETWORK APPLICATIONS**  
**Lesson 2**  
**How a search engine works**

20<sup>th</sup> December 2025

*Prepared and presented by Edison Muyala*

A search engine has three main parts. These are:

- a. Spider
- b. Indexing database(engine)
- c. Query engine

These three components operate as follows:

1. Before users invoke the search engine, a program called spider searches for new items on the web to add to the search engine index database.
2. The search engine indexing database receives everything the spider brings to it. It scans the documents for key words and generates the indexes and then store them in them in an index database.
3. Once the user submits the search string (a word or phrase) the query engine looks for the key words and retrieve the associated documents and rank them according to some preferences like most visited.

The diagram below shows how a search engine works.



## EXERCISE 2

Here are some of the questions for you to practice. No need for you to send responses, its for your own practices.

1. Mention the **three** main parts of the search engine

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( 3 Marks)

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2. With a well labelled diagram, explain how a search engine works

1. **What is the primary purpose of the study?** (10 points)

2. **What are the key variables being studied, and how are they measured?** (10 points)

3. **What are the main findings of the study, and what conclusions can be drawn?** (10 points)

4. **What are the implications of the findings for the field of study?** (10 points)

5. **What are the strengths and limitations of the study?** (10 points)

( 7 marks)