Data Type

-Snehal Deshmukh.

What are data types in any programming language?

- In programming languages, a data type is a classification of data items that determines the kind of values that they can hold and the operations that can be performed on them. Different programming languages provide different data types.

Data Type	Used for	Example
String	Alphanumeric characters	hello world, Alice, Bob123
Integer	Whole numbers	7, 12, 999
Float (floating point)	Number with a decimal point	3.15, 9.06, 00.13
Character	Encoding text numerically	97 (in ASCII, 97 is a lower case 'a')
Boolean	Representing logical values	TRUE, FALSE

How things works in backend when we store and fetch values.

❑ **Storing values**:

• The application sends a request to the backend to store data.

• The backend receives the request and validates it to ensure that the data is in the correct format and meets any other requirements.

• The backend then stores the data in a database or other persistent storage system. This may involve creating a new record in a database table, or updating an existing record with new values.

• Once the data has been stored, the backend sends a response back to the application to indicate that the operation was successful.

❑ **Fetching values**:

- The application sends a request to the backend to fetch data.

- The backend receives the request and validates it to ensure that it is in the correct format and meets any other requirements.

- The backend then retrieves the requested data from the database or other persistent storage system. This may involve executing a database query to select the desired data.

- Once the data has been retrieved, the backend sends a response back to the application, usually in the form of a data object or collection, such as an array or JSON document.

- Note that the specific steps involved in storing and fetching data can vary depending on the backend system being used, the type of data being stored or retrieved, and the application's requirements. Additionally, backend systems may provide additional functionality, such as data validation, indexing, and security measures, to ensure that data is stored and retrieved efficiently and securely.