# Dart Data Types - Notes

## What is a Data Type?

A data type is the characteristic of a variable that determines what kind of data it can hold. It defines the type of value a variable can store, such as numbers, text, or collections. Dart includes built-in types as well as user-defined ones.

## 1. int - Integer

```
Used to store whole numbers (positive or negative) without decimal points.


Example:

  int age = 25;
```

## 2. double - Decimal Number

```
Stores floating-point (decimal) numbers.


Example:

  double pi = 3.1416;
```

## 3. num - Super Type for int and double

```
Can hold both integer and floating-point values.

Example:

  num a = 10;

  a = 10.5;
```

## 4. String - Text or Characters

```
Used to store text.


Example:
```

```
String name = "TheXcode";
```

## 5. bool - Boolean

```
Stores either true or false.


Example:

  bool isLoggedIn = true;
```

## 6. var - Type Inference

```
Automatically detects and assigns the data type based on value.


Example:

  var city = "Indore";
```

## 7. dynamic - Changeable Type

```
Can hold any type of value and can change at runtime.


Example:

  dynamic value = 10;

  value = "Hello";
```

## 8. List - Collection (like Array)

```
Stores an ordered group of values.


Example:

  List<String> names = ["Ram", "Shyam", "Golu"];
```

## 9. Map - Key-Value Pairs

# Dart Data Types - Notes

```
Stores values as a pair of key and value.


Example:

  Map<String, int> marks = {"Math": 90, "English": 80};
```

## 10. Set - Unique Collection

```
Stores unique items (no duplicates).


Example:

  Set<int> ids = {1, 2, 3};
```

## Other Dart Data Types:

*BigInt, Runes, Symbol, Null, Object, Function, Future, Stream, Never, Duration, Uri*