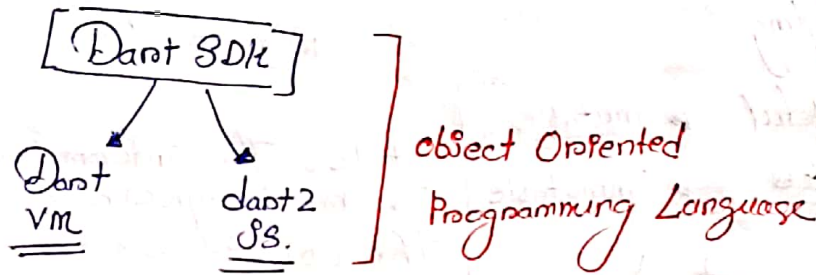


# Dart

- Open Source general Purpose Programming Language developed by google.
- Supports application development in both Client & Server Side.
- Bears a strong resemblance to Java, C & JS.
- Launched in 2011, became popular after 2015.



Compilation : `dart <file-name> **`

Comments : Portions of the code, not executed by the compiler. They are kept as a description of the program.

- They are a set of statements which provide a proper documentation of the code.

Types of dart comments :

- 1) Single line comment (`//`) : Used to comment until a break occurs.
- 2) Dart Multiline comment (`/* ... */`) : Used to comment a whole section of the code.

`/*` → Start  
`*/` → end

`// This is a single line.`

`/*  
* This is  
* multiline  
*/`

Documentation Comments : Special comments used to provide references to packages.

1) `///` → C# Style

2) `/** ... */` → JavaDoc Style.

Variables in Dart : It is a name assigned to a memory location, where the user stores data. The data can be fetched any time by calling the name of the variable.

↳ There are various types of variables that store various types of data.

↳ The variable we shall use, depends on the type of data to be stored.

To declare a variable  
type <variable-name>

### Types of Variables

Integer (-1, 1, 6, 2, ...)

Double (1.23, 6.11, 2.3, ...)

String ("a", "name", ...)

Booleans (true, false)

List

Maps

### Rules

i) Variable names can't be identifiers or keywords.

ii) Variable names can contain alphabets or numbers.

iii) Cannot contain spaces or special characters, except "\$" or "\_"

iv) Variable names cannot begin with numbers

\* "Dart supports type checking"



## Keywords

A standard set of reserved words, whose functions are predefined. They cannot be used as variable names.

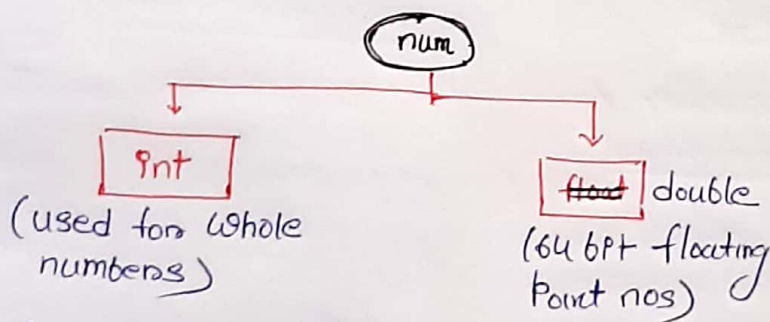
abstract	continue	new	this	as	false
true	final	null	default	throw	finally
catch	do	for	try	catch	get
dynamic	rethrow	typedef	if	else	var
return	break	enum	void	int	String
double	bool	list	map	implements	set
switch	case	while	static	import	export
in	external	this	super	with	class
extends	is	const	yield	factory	

## Datatypes

- a variable stores some data, which can be numbers, textual data or logic (true/false).
- Each variable is preceded with a datatype that determines the type of data to be stored.  
 $\langle \text{data-type} \rangle \langle \text{variable-name} \rangle$
- In 'Dart' we have special keywords to determine the datatype for each variable.
- Since dart is a statically typed language the datatype of a variable is decided before runtime and cannot be changed later, during runtime.

Data type	Keyword	Description
Numbers	int, double, num, BigInt	used to represent, numerical literals (1, 2, 3, 6.403, etc)...
Text	String	"Pokemon", 'abc', "andy" etc.
Booleans	bool	represents boolean values true or false.
List	List	ordered groups of objects. [1, 2, 3], ["a", "b", "c"]
Maps	Map	represents a set of key value pairs.

Numbers : used to hold numerical data



# Refer to Program - lec01

Text : used to store textual data, to represent text, the string keyword is used.

↳ A string is a sequence of characters. (UTF-16).

↳ A string can be represented using  
single quotes (' ')  
double quotes(" ")