

# 01 Variables :

## Declaring a single variable

- **var name type** is the syntax to declare a single variable.
- If a variable is not assigned any value, go automatically initialises it with the **zero value** of the variable's type

## Declaring a variable with initial value

A variable can also be given a initial value when it is declared.

**var name type = initialvalue** is the syntax to declare a variable with initial value.

## Type inference

If a variable has an initial value, Go will automatically be able to infer the type of that variable using that initial value. Hence if a variable has an initial value, the *type* in the variable declaration can be omitted.

If the variable is declared using the syntax **var name = initialvalue**, Go will automatically infer the type of that variable from the initial value

## Short hand declaration

Go also provides another concise way for declaring variables. This is known as short hand declaration and it uses **:=** operator.

**name := initialvalue** is the short hand syntax to declare a variable.

