## **Implicitly Typed Variables**

## What

- > The variables that are declared with 'var' keyword are called as 'implicitly-typed variables' (a.k.a type-inference).
- > Implicitly-typed variables are declared without specifying the 'type' explicitly; so that the C# compiler automatically identifies the appropriate data type at compilation-time, based on the value assigned at the time of declaration.

## **Implicitly Typed Variables**

var variableName = value;

- > While declaration, the 'type' of implicitly-typed variables is fixed.
  - It is not possible to change the type of that variable or assign "other type of values" into the implicitly typed variables, after declaration.
- > Implicitly Typed Variables can only be "local variables"; can't be used for method parameters, return type or fields.
- > Implicitly Typed Variables must be initialized along with declaration.
- It is not possible to declare multiple implicitly typed variables in the same statement.
  - $\rightarrow$  Ex: var x = 10, y = 20; //error
- > It is not possible to assign "null" into implicitly typed variables (while declaration).
  - > Ex: var x = null; //error

