**Ruby Variable : -**

In ruby programming languages every variable is treat as object (Just Like python variable).

**Variable Naming Convention : -** In ruby programming every variable should follow the underscore ‘\_’ part.

Example :- first\_name,birth\_date,product\_id.

**Type of variable :-** There are basicly 4 type of variable in ruby.

1. Global variable.

2. Local variable.

3. Class variable.

4. Instance variable .

1. Global Variable $: - A global variable name starts with a $ sign. Its scope is globally, means it can be accessed from any where in a program.An uninitialized global variable will have a nil value.

2. Local Variable ( \_ ):-A local variable name starts with a lowercase letter or underscore (\_). It is only accessible or have its scope within the block of its initialization. Once the code block completes, variable has no scope.When uninitialized local variables are called, they are interpreted as call to a method that has no arguments.

3. Class Variable @@ :- A class variable name starts with @@ sign. They need to be initialized before use. A class variable belongs to the whole class and can be accessible from anywhere inside the class. If the value will be changed at one instance, it will be changed at every instance.

A class variable is shared by all the descendents of the class. An uninitialized class variable will result in an error.

4.Instance Variable @: -An instance variable name starts with a @ sign. It belongs to one instance of the class and can be accessed from any instance of the class within a method. They only have limited access to a particular instance of a class.They don't need to be initialize. An uninitialized instance variable will have a nil value.

**Data Types :-** in ruby there is no specific data type, but in ruby data type is divide into categorys.

1. Numbers
2. Strings
3. Symbols
4. Hashes
5. Arrays
6. Booleans

1 . Number : - In number category all the numerical value store in number format division.

* Fixnum They are normal numbers 1
* Bignum They are big numbers 111111111111
* Float Decimal numbers 3.0
* Complex Imaginary numbers 4 + 3i
* Rational They are fractional numbers 9/4
* BigDecimal Precision decimal numbers 6.0

2 . Strings : -