Variables in java

Variables: These are the entities which actually defines the state or property of an object. There are 3 types of variable :

1. Static variable

2. non-static variable or instance variable

3. local variable

1. Static variable:

a. This variable get defines only at class level.

b. To access the static variable in any of the methods (static or non static):

i. To access in the same class: Directly by variable name.

ii. To access the variable from different class : Class name. variable name.

Example

**public** **class** StaticVariables {

// syntax:

// type\_of\_variable datatype variablename = value;

**static** **int** *a*=10;

**public** **static** **void** main(String[] args) {

System.***out***.println(*a*);

*a* = *a*+2;

System.***out***.println(*a*);//calling of static variable in the same class

System.***out***.println(Test.*b*);// calling of static variable from other class

*a*=60;

System.***out***.println(*a*);//60

StaticVariables sv = **new** StaticVariables();

sv.m1();

}

**public** **void** m1() {

System.***out***.println(*a*);//calling of static variable in the same class

System.***out***.println(Test.*b*);// calling of static variable from other class

}

**public** **class** Test {

**static** String *b* = "Velocity";

}

Output from StaticVariables class:

10

12

Velocity

60

60

Velocity

2. Non Static variable or instance variable:

i.These variable are defined only at class level.

ii. Non static variable can only be accessible through object.

* Same class or different class in static method: By creating object and call that variable by referencevariablename.variablename.
* In Non static method:

a. Same class: directly variable name.

b. Different class: By creating object and then call reference variablename.variablename.

iii. The value of non-static variable varies from object to object.

Example:

**package** variablesinjava;

**public** **class** NonStaticVariables {

// Syntax:

// datatype variable\_name = value;

**int** i = 50;

String s = "abc";

**public** **static** **void** main(String[] args) {

NonStaticVariables nsv =**new** NonStaticVariables();

System.***out***.println(nsv.i);//50

nsv.i = 10;

NonStaticVariables nsv1 = **new** NonStaticVariables();

nsv1.i = 20;

System.***out***.println(nsv.i);//10

System.***out***.println(nsv1.i);//20

nsv.s = nsv.s + "def";

System.***out***.println(nsv.s);//abcdef

}

}

Output:

50

10

20

abcdef

