# **This Keyword**

This is a keyword in java. The keyword “This” can be used with

1. Can be used to refer any member of the current object from within an instance method or a constructor
2. **“this”** keyword can also be used inside Methods to call another Method from same Class.
3. **“this”** keyword can be used inside the constructor to call another overloaded constructor in the same Class. It is called the Explicit Constructor Invocation.

**Accessing the class variables:**

Example:

**package** FPPackage;

**public** **class** ThisKeyword {

**static** **int** *a*;

**static** **int** *b*;

**public** **void** assign(**int** c, **int** d) {

*a* = c;

*b* = d;

}

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

ThisKeyword tk = **new** ThisKeyword();

tk.assign(5,6);

System.***out***.println("A value is "+*a*);

System.***out***.println("B value is "+*b*);

}

}

Result:

A value is 5

B value is 6

In the above example we have created a method “assign(int c, int d)” to assign values to the instance variables a and b.

If we change the method to assign(int a, int b) then the program confuses as to whether it has to assign the values to the local variables or instance variables.

Example:

**package** FPPackage;

**public** **class** ThisKeyword {

**static** **int** *a*;

**static** **int** *b*;

**public** **void** assign(**int** a, **int** b) {

a = a;

b = b;

}

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

ThisKeyword tk = **new** ThisKeyword();

tk.assign(5,6);

System.***out***.println("A value is "+*a*);

System.***out***.println("B value is "+*b*);

}

}

Result:

A value is 0

B value is 0

So, we use this keyword to assign the values to the instance variables.

Example:

**package** FPPackage;

**public** **class** ThisKeyword {

**static** **int** *a*;

**static** **int** *b*;

**public** **void** assign(**int** a, **int** b) {

**this**.*a* = a;

**this**.*b* = b;

}

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

ThisKeyword tk = **new** ThisKeyword();

tk.assign(5,6);

System.***out***.println("A value is "+*a*);

System.***out***.println("B value is "+*b*);

}

}

Result:

A value is 5

B value is 6

**Accessing the Instance Variables:**

**package** FPPackage;

**public** **class** ThisExample {

**int** a = 10;

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

ThisExample te = **new** ThisExample();

te.method1();

}

**public** **void** method1() {

**int** a = 30;

System.***out***.println("a value is "+**this**.a);

}

}

**Accessing a method from another method in the same class:**

**package** FPPackage;

**public** **class** ThisExample {

**int** a = 10;

**public** **void** method1() {

System.***out***.println("I am in method 1");

**this**.method2();

}

**public** **void** method2() {

System.***out***.println("I am method 2");

}

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

ThisExample te = **new** ThisExample();

te.method1();

}

}

**Accessing a constructor from another constructor in the same class:**

**package** FPPackage;

**public** **class** ThisExample {

**int** a = 10;

ThisExample(){

**this**("Subbus Selenium Tutorials");

System.***out***.println("Normal Constructor");

}

ThisExample(String str){

System.***out***.println("Parameterized constructor and paramenter is "+str);

}

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

ThisExample te = **new** ThisExample();

}

}