Tutorial 1 : Language Fundamentals

1. Identifiers
2. Reserve Words
3. Data Types
4. Literals
5. Arrays
6. Types of Variables
7. Var-args Methods
8. Main Methods
9. Command Line Arguments
10. Java Coding Standards

**IDENTIFIERS**

A name in java programming is called Identifier, which can be used for identification purposes. It can be method name or variable name, class name or label name

class Test

{

public static void main (String [] args)

{ int x;

// System.out.print( “ Hello ”);

}

}

Following are the identifiers in above program

1. Test – class name
2. Main - method name
3. String - class name
4. args – variable name (name of array)
5. X - variable name

Rules for defining java identifiers:

1. a to z
2. A to Z
3. 0 to 9
4. $
5. \_

Only allowed characters in java identifiers are above

**Rules**:- for identifiers

1. If we are using any other character , we will get compile time error

Total\_number – allowed

Total# - not allowed

1. Identifiers can’t starts with numerical values

Total123 – valid

123Total – invalid

1. Java identifiers are **case sensitive** of course java languages itself is treated as case sensitive

Programming language

class Test

{

int number = 10;

int Number = 20;

int NUMBER = 30;

}

In this case we can differentiate with respect to case.

1. In Java , there is no length limit for java identifiers, but it is not recommended to take too lengthy identifiers

Class Test

{

public static void main (String [] args)

{ int xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx = 10;

// System.out.print( “ Hello ”);

System.out.print(xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx);

}

}

This code is a valid code as java doesn’t have any limit on the length of identifiers,

But it is not a good practice to use a lengthy identifiers.

1. We can’t use reserved words as identifiers

Int x = 10 - valid;

Int if = 10 – invalid; (because if is reserved words)

We can’t use reserve words as identifiers

1. We can use already defined java class name or interface name as identifiers.

class Test{

public static void main (String [] args)

{

int String = 888;

int Runnable = 999;

System.out.println(String);

System.out.println(Runnable);

}

}

* All predefined class name and interface name we can use as a identifiers, but it is not a good practice to use it.
* Eventhough it is valid but it is not a good programming practice , because it reduces readability and creates confusion

Which of the following are valid java identifiers

1. Total\_number - valid
2. Total# - not valid
3. 123total - not valid
4. Total123 - valid
5. ca$h - valid
6. \_$\_$\_$\_$\_ - valid
7. all@hands -not valid
8. java2share -valid
9. Integer - valid – class name
10. Int - valid – not a reserve words
11. Int - not valid - reserve words

In java some words are reserved words to represent some meaning or functionality such types of words are called reserved words (53) keywords are in java

Reserved Words (53) = Keywords (50) + Reserved Literals (3)

Keywords (50) – if the functionality

+ Reserved Literals (3)