Prog1:   To print your Name:

```
class Program1
{
    public static void main(String[] args)
    {
        System.out.println( "Dixith"  ) ;
    }
}
```

Tokens :

The smallest unit in a programming language which is used to create a program is known as tokens.
Token are further classified into :
1. keyword
2. identifiers
3. literals / values
4. separators, operators l

Keywords:

pre-defined reserved words which a compiler can understand, such words are known as keywords.
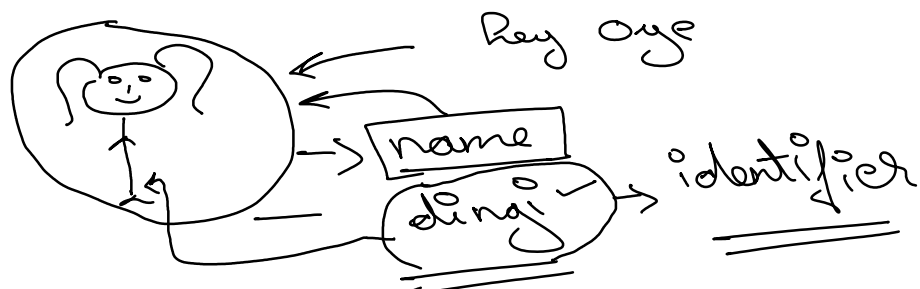
In java we have 51 keywords.

> Note:
>   1. are always in lower case.

examples:
class, public, void, static

Identifiers :

→ class ✓　　→ Package —
→ variable ✓　→ interface —
→ methods —

programmer should give [name] ✓
_____

The name given by the programmer to the elements of java, is known as Identifier.

Rules For Identifiers :

1. Identifiers should never start with numeric values
2. Except _ and $ no other special character is allowed in identifiers.
3. We cannot use a keyword as an identifier
4. We cannot have a space in the identifier

Note :
　　　If the rules are not followed we get **Compile Timer Error**

Conventions for Identifiers :
　　　　　　　Convention are the standards followed by the Industry

　　　Rules　Vs Convention

Rule	Convention
1. Rule is mandatory to follow	1. Not mandatory
2. javac checks for rules	2. javac does not check conventions
3. If not followed we get CTE	3. If not followed we will not get CTE

It is always recommended to follow the conventions.

example :

Convention for class name :

1. class name should begin with upper case
2. if the class name is a combination of more than one word, the first letter of every word should be in upper case and remaining should be in lower case.

   ex: helloworld // wrong convention

   HelloWorld // correct convention

Literal :

The **data/values** that's is used in the program is known as literals.

Types Of Literals:

1	Integer numbers	1 , 2 , 0 , -1 , -2 ,…			
2	Decimal numbers	1.0 , 0.0 , -1.1 ,…			
3	Characters	'a' , 'b' , '2' , ' '	1. Characters must be enclosed within single quotes 2. Characters are cases sensitive 'a' not same as 'A' 3. Length of the character cannot be more than 1		
4	Strings	"hello", "a", "2", " "	1. Strings must be enclosed within double quotes. 2. Strings are case sensitive 3. length of a String can be anything.		
5	boolean	true , false ,	1. true and false are keywords of java		

Statement to print literals/data :

In java we have print statements which help us to print data/ literals on the output console :

1. System.out.print()
2. System.out.println()

1. System.out.print() :

It is used to print data on the systems output console.

➤ System.out.print('a') ; ✓

a	b	_

➢ System.out.print('a') ; ✓
➢ System.out.print('b') ; ✓

a	b	

Note: System.out.print(data), it will print the
given data and moves the cursor to the right.
for ex, refer **app1/P1.java**

➢ System.out.print( ) ; // CompileTimeError

Note: For System.out.print() it is mandatory to pass data, if we try to use without
passing data, then we get CTE.
for ex, refer **app1/P2.java**

1. System.out.println() ;

It is also used to print data, as well as a new line.

➢ System.out.println('a') ; ✓
➢ System.out.println('b') ; ✓

a	—	
b	—	
—		

Note : System.out.println(data) prints the
data and then it prints a new line.
for ex, refer **app1/P3.java**

➢ System.out.println() ; --> it is possible
for ex: refer, **app1/P4.java**

Assignment 1: What is the difference between print and println stmts