What is variable ?

1. Variable is name of memory location to store values.
2. We will use variable to store the data and use the data once it is required.

What is primitive data type

Types of data types

1. Primitive
2. Non-Primitive/ derived data types

|  |  |  |
| --- | --- | --- |
| Data type | default value | range |
| Boolean | FALSE | 1bit |
| Char | \u0000' | 2 bytes |
| Byte | 0 | 1 byte |
| Short | 0 | 2 bytes |
| Int | 0 | 4 bytes |
| Long | 0l | 8 bytes |
| Float | 0.0f | 4 bytes |
| Double | 0.0d | 8 bytes |

Sample code:

**package** datatypes;

**public** **class** Datatypes {

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

**boolean** b=**true**;

**char** c='c';

**char** a=69;//ascii value will prnit

**byte** b1=98;

**short** s=15079;

**int** i=1231233390;

**long** l=1234568182;

**float** f=359.99999f;

**float** f1=(**float**)359.99;

**double** d=359.669d;

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

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

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

System.***out***.println(b1);

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

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

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

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

System.***out***.println(f1);

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

}

}

Output:

true

c

E

98

15079

1231233390

1234568182

360.0

359.99

359.669

Local variables and Global variables:

Local variables contains garbage values

Global variables contains null value/default values.

**Global variables** are declared outside any function, and they can be accessed (used) on any function in the program. **Local variables** are declared inside a function, and can be used only inside that function. It is possible to have **local variables** with the same name in different functions.