Types of Variables in java :

In java based on the data type we have only 2 types of variables :

1) Primitive Variables
2) Reference Variables

Primitive Variables :

If any variable in java declared with primitive data type i.e
byte, short, int, long, float, double char and boolean then it is called Primitive Variable.

Example :

int x = 10;

On primitive variable we can't assign null literal as well as with primitive variable we can't invoke a method.

int x = null; //Invalid

int y = 23;
y.m1(); //Invalid

Reference Variable :

If we declare any variable with reference data type i.e with class name, interface name and so on then it is called Reference
variable.

Example :

Scanner sc = new Scanner(System.in); //sc is a reference variable
Student s; //s is a reference variable

On reference variable we can assign null literal as well as we can invoke any method on reference variable.

Employee e1 = null; //Valid

Scanner sc = new Scanner(System.in);
        sc.nextInt();

Now, Based on the declaration position, Variables are further divided into four types :

1) Class Variable OR Static Field   class Level Variables
2) Instance Variable OR Non static Field   [The Variables which we can define inside a class
                                            but outside of the method]

3) Local Variables   Method Level Variable
4) Parameter Variables   [The variables which are defined inside a method]

```
                    Variables
                   /         \
                  /           \
           class Level      Method Level
            /     \            /       \
           /       \          /         \
    Class Variable  Instance Variable  Local Variable  Parameter Variable
    OR Static Field OR Non static Field
```