

# Naming Conventions

1. Variable names must be in Camel case starting with lower case.

**Example:**

audioSystem, myName, studentId

2. Names representing constants (final variables) must be all uppercase using underscore to separate words.

**Example:**

MAX\_ITERATIONS, COLOR\_RED

3. Class names should normally use the Pascal Casing convention.

**Example:**

class MyClass: // ...x = 5

4. Interface Name: Interface names should be use Camel Casing convention

**Example:**

```
interface <interface_name>{  
    // declare constant fields  
}
```

5. Names representing methods must be verbs and written in Camel case starting with lower case.

**Example:**

getName(), computeTotalWidth()

6. Private class variables should have underscore (\_) suffix.

**Example:**

```
class Person{  
    private String name_  
    ...
```

```
}
```

7. Arrays should be declared with their brackets next to the variable name.

**Example:**

```
double vertex[];
```

## Specific Naming Conventions

1. is prefix should be used for boolean variables and methods.

**Example:**

isSet, isVisible, isFinished, isFound, isOpen

2. Plural form should be used on names representing a collection of objects.

**Example:**

```
int values[];
```

3. n prefix should be used for variables representing a number of objects.

**Example:**

```
nPoints, nLines
```

4. No suffix should be used for variables representing an entity number.

**Example:**

```
tableNo, employeeNo
```

## Exception Names:

Because exceptions should be classes, the class naming convention applies here. However, you should use the suffix "Error" on your exception names (if the exception actually is an error).

## Types:

Type conversions must always be done explicitly. Never rely on implicit type conversion.

**Example:**

```
floatValue = (float) intValue;
```

## Loops:

1. Loop control statements must be included in the for() or while() construction.

**Example:** for Loop:

```
sum = 0;  
for (i = 0; i < 100; i++)
```

```
    sum += value[i];
```

```
while Loop:  
boolean isDone = false;  
while (!isDone) {  
  
}
```

## Layout:

1. Basic indentation should be 2.

**Example:**

```
for (i = 0; i < nElements; i++)  
    a[i] = 0;
```

2. The if-else class of statements should have the following form:

**Example:**

```
if (condition)  
  
    { statements; }  
  
else  
  
    { statements; }
```

3. A try-catch statement should have the following form:

**Example:**

```
try
{ statements; }

catch (Exception exception)
{ statements; }

finally
{ statements; }
```

## White Space

Operators should be surrounded by a space character.

- Reserved words should be followed by a white space.
- Commas should be followed by a white space.
- Colons should be surrounded by white space.
- Semicolons in for statements should be followed by a space character.

### Example:

```
a = (b + c) * d;

while (true) {
doSomething (a, b, c, d);
case 100 :
for (i = 0; i < 10; i++) {
```

## Variable Ordering :

Class variables order should be Public, Protected, Private.

## Method Ordering:

Methods order should be Constructor , Public method , Protected method ,Private method.

