

# Java features you may have missed

## Diamond operator

Instead of the standard:

```
ArrayList<String> al = new ArrayList<String>();
```

You can drop the second qualifier:

```
ArrayList<String> al = new ArrayList<>();
```

## Underscores in Large Numeric Values

Instead of the less readable numeric value like:

```
long largeNumber = 1231321326;
```

You can have a value separated by underscores:

```
long largeNumber = 1_231_321_326;
```

# Inline multiple catch expressions

Instead of:

```
try
{
    callBusinessMethod();

} catch (NumberFormatException ex)
{
    handleError(ex);

} catch (IOException ex)
{
    handleError(ex);
}
```

You can have a simplified form, like:

```
try
{
    callBusinessMethod();

} catch (NumberFormatException | IOException ex)
{
    handleError(ex);
}
```

## Autocloseable interface

Object extending this interface will not need to be explicitly close. This is increasingly important with for database operations from java and includes : *java.sql.CallableStatement*, *Connection*, *PreparedStatement*, *Statement*, *ResultSet*.

```
Statement stmt = null;  
try {  
    stmt = con.createStatement();  
} catch (Exception ignore) {  
} finally {  
    if (stmt != null) stmt.close()  
}
```

It can be simplified:

```
try (Statement stmt = con.createStatement()) {  
} catch (Exception ignore) {  
}
```

# Effectively final

Running the code below in Java 7, without the final qualifier will throw an error: *“Cannot refer to the non-final local variable message defined in an enclosing scope”*

```
public static void main(String[] args) {  
    final String message = "Hello world";  
    new Runnable() {  
        @Override  
        public void run() {  
            System.out.println(message);  
        }  
    }.run();  
}
```

But it will run without a problem with Java 8, since *message* variable will be marked as *final* implicitly:

```
public static void main(String[] args) {  
    String message = "Hello world";  
    new Runnable() {  
        @Override  
        public void run() {  
            System.out.println(message);  
        }  
    }.run();  
}
```