

## Method Reference Cheat Sheet

**object::instanceMethod.** Given object `ob` with method `meth`:

```
x -> ob.meth(x)
```

can be written as

```
ob::meth
```

### Example

Rewrite

```
button.setOnAction(evt -> p.print(evt));
```

as

```
button.setOnAction(p::print);
```

**Class::staticMethod.** Given a class `ClassName` and one of its static methods `meth()`

```
x -> ClassName.meth(x)
```

can be rewritten as

```
ClassName::meth
```

### Example

Rewrite

```
BiFunction<Integer, Integer, Double> f = (x,y) -> Math.pow(x, y);
```

as

```
BiFunction<Integer, Integer, Double> f = Math::pow;
```

**Class::instanceMethod.** Given a class `ClassName` and one of its instance methods `meth()`

```
(x,y) -> x.meth(y)
```

can be rewritten as

```
ClassName::meth
```

### Example

```
(str1, str2) -> str1.compareToIgnoreCase(str2)
```

can be written as

```
String::compareToIgnoreCase
```

**Class::new.** Given a class name `ClassName` and one of its constructors that accepts an argument of type `T`, `ClassName::new` is equivalent to `(T x) -> new ClassName(x)`. The type `T` and number of arguments are determined by context.

Example Given a List of Labels, the following produces a list of Button objects, with those labels

```
Stream<Button> stream = labels.stream().map(Button::new);
```

Example Constructor reference `int[]::new` is equivalent to `len -> new int[len]`