

Lambda Expressions Syntax

Void in, Void out

```
public interface Runnable {  
    public void run();  
}
```

Runnable r1 = () -> System.out.println("line 1");;

Runnable r2 = () -> {
 System.out.println("line 1");
 System.out.println("line 2");
};

1 Value in, Void out

```
public interface Consumer {  
    public void consume(double val1);  
}
```

Consumer c1 = (x) -> System.out.println(x);

Consumer c2 = (x) -> { double z = x * x;
System.out.println(z); };

1 Value in, Value out

```
public interface Function {  
    public double apply(double val1);  
}
```

Function $f1 = (y) \rightarrow y * y;$

Function $f2 = (y) \rightarrow \{ \text{double } z = y * y;$
 $\text{System.out.println}(z);$
 $\text{return } z; \}$;

2 Values in, Value out

```
public interface BiFunction {  
    public double apply(double val1, double val2);  
}
```

BiFunction b1 = $(x, y) \rightarrow x * y;$

BiFunction b2 = $(x, y) \rightarrow \{ \text{double } z = x * y;$
 $\text{System.out.println}(z);$
 $\text{return } z; \};$