

Conditional operator ? :

Conditional operator is helpful when you need to use one of the two different values in an expression depending on a condition. It is a ternary operator, i.e. it has three operands:

```
<condition> ? <value if true> : <value if false>
```

It can be applied to values of any type: numeric, boolean, strings, any classes. The following expression evaluates to 0 if the backlog contains no orders and the amount of the first order in the backlog queue otherwise:

```
backlog.isEmpty() ? 0 : backlog.getFirst().amount
```

Conditional operators can be nested. For example, the following code line prints the level of income of a person (High, Medium, or Low) depending on the value of the variable `income`:

```
traceln( "Income: " + ( income > 10000 ? "High" : ( income < 1500 ? "Low" : "Medium" ) ) );
```

This single code line is equivalent to the following combination of "if" statements:

```
trace( "Income: " );
if( income > 10000 ) {
    traceln( "High" );
} else if( income < 1500 ) {
    traceln( "Low" );
} else {
    traceln( "Medium" );
}
```