

Conditional Operator

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Objectives

- To write expressions using the conditional operator (§3.14)

Outline

- Discussed
 - Boolean data type and Boolean expressions
 - If-statements (one-way, two-way, multi-way, and nested if-statements) and their flow charts
 - Common errors and pitfalls
 - 3 (“big”) programming problems (subtraction quiz, compute BMI, compute taxes)
 - Logical operators and two more (“big”) programming problems (LeapYear, Lottery)
 - Switch statement
- Conditional operator

Conditional Operator

boolean-expression ? exp1 : exp2

Conditional Operators

```
if (x > 0)
```

```
    y = 1
```

```
else
```

```
    y = -1;
```

is equivalent to

```
y = (x > 0) ? 1 : -1;
```

More Examples

```
if (num % 2 == 0)
    System.out.println(num + "is even");
else
    System.out.println(num + "is odd");
```

```
System.out.println(
    (num % 2 == 0)? num + "is even" :
    num + "is odd");
```

Categorizing Operators

- The number of operands
 - Ternary operator
 - (boolean-expression) ? expression1 : expression2
 - Binary operator
 - Examples?
 - Unary operator
 - Examples?

Questions?