

# Lab 1.02 - Using the Interpreter

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## Part 1

Using the interpreter, type in the expressions below. Copy and paste the output into the output column. If the result is unexpected, note that in the third column.

### Section 1

|   | Input                     | Output | Did it do something unexpected? |
|---|---------------------------|--------|---------------------------------|
| a | <code>5 + 2 * 2</code>    |        |                                 |
| b | <code>2/3</code>          |        |                                 |
| c | <code>2.0 * 1.5</code>    |        |                                 |
| d | <code>(2 + 3) * 10</code> |        |                                 |
| e | <code>5.0 // 2</code>     |        |                                 |
| f | <code>5.0 % 2</code>      |        |                                 |

### Section 2

|   | Input            | Output | Did it do something unexpected? |
|---|------------------|--------|---------------------------------|
| a | <code>a</code>   |        |                                 |
| b | <code>'a'</code> |        |                                 |

### Section 3

|   | Input                  | Output | Did it do something unexpected? |
|---|------------------------|--------|---------------------------------|
| a | <code>'a + b'</code>   |        |                                 |
| b | <code>'a' + 'b'</code> |        |                                 |

### Section 4

|   | Input                  | Output | Did it do something unexpected? |
|---|------------------------|--------|---------------------------------|
| a | <code>'a' * 'b'</code> |        |                                 |
| b | <code>'a' * 2</code>   |        |                                 |

## Part 2

Before going to the IDE

1. For each item, predict the data type of the result and enter into the "String/Integer/Float" column.

2. Next, predict the value of the result for each item and enter it into the "Prediction of Result" column.

|   | Expression                     | String/Integer/Float | Prediction of Result | Interpreter Result |
|---|--------------------------------|----------------------|----------------------|--------------------|
| a | <code>10 * 2</code>            | integer              | 20                   | 20                 |
| b | <code>.5 * 2</code>            |                      |                      |                    |
| c | <code>10/2</code>              |                      |                      |                    |
| d | <code>10%2</code>              |                      |                      |                    |
| e | <code>2 ** 3</code>            |                      |                      |                    |
| f | <code>(2+5)*3</code>           |                      |                      |                    |
| g | <code>2 + 5 * 3</code>         |                      |                      |                    |
| h | <code>'ab' + '12' + '3'</code> |                      |                      |                    |
| i | <code>x</code>                 |                      |                      |                    |
| j | <code>"ab" + "cd"</code>       |                      |                      |                    |
| k | <code>'abc' * 2</code>         |                      |                      |                    |
| l | <code>'1'*2 + '2' * 3</code>   |                      |                      |                    |
| m | <code>1 * 2 + '3' * 2</code>   |                      |                      |                    |
| n | <code>'A' ** 2</code>          |                      |                      |                    |
| o | <code>'bc' % 2</code>          |                      |                      |                    |
| p | <code>'bc' / 2</code>          |                      |                      |                    |

## Now go to the IDE

Use the interpreter to evaluate the expressions, write down results in the "Interpreter Result" column.