Group Exercise 03: Practice with Variables and Memory
CPSC 301 - 2016W2

Consider the following Python code:

1: speed = 4
2: time = 2.5
3: distance = 0
4: distance = speed * time
5: time = time + 2
6: distance = speed * time
7:

Trace this code and draw out the state of memory at the steps indicated below. Lab your memory locations to indicate the memory location id (e.g. id1) and type (e.g. int), as done in the python tutor visualizer. You do not need to draw a memory location if it is no longer being point at by a variable.

The model after the first assignment step has been completed for you to give you an example.

1. For example: just after the speed = 4 line executes:

2. Just after the distance = 0 line executes:

3. Just after the time = time + 2 line executes:
4. Just **after** the final line executes:

```
Global frame
  speed
  time
  distance
```

```
<table>
<thead>
<tr>
<th>id1: int</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
<tr>
<td>id5: float</td>
</tr>
<tr>
<td>4.5</td>
</tr>
<tr>
<td>id6: float</td>
</tr>
<tr>
<td>18.0</td>
</tr>
</tbody>
</table>
```