Blocks-world problem

Each block has a unique id.

Blocks are in stacks.

Can move one block at a time.

Always room for another stack.

Initial state

```
<table>
<thead>
<tr>
<th>A</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
</tr>
</tbody>
</table>
```

table on (A, C)
ontoable (C)
ontoable (B)
clear (A)
clear (B)

Goal state

```
<table>
<thead>
<tr>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
</tbody>
</table>
```
clear(A)
on(A, B)
on(B, C)
tonable (C)
move \( (x, y) \) from \( y \) onto \( x \) where \( x \) and \( y \) are blocks

precondition: clear \( (x) \)
clear \( (y) \)

effect: \neg \text{clear}(y)
on \( (x, y) \)
either \neg \text{on}(x, z) \text{ or } \neg \text{onto}(x) \)

NEED TO FIX THIS
move from table \((x, y)\) to or top of block \(y\)

precondition: on table \((x)\)
clear \((x)\)
clear \((y)\)

effect: \(\neg\) on table \((x)\)
\(\neg\) clear \((y)\)
on \((x, y)\)

move from block \((x, y, z)\) to or top of block \(z\) to on top of block \(y\)

precondition: \(\neg\) clear \((z)\), on \((x, z)\), clear \((x)\), clear \((y)\)

effect: clear \((z)\), \(\neg\) on \((x, z)\), clear \((y)\), on \((x, y)\)

move to table \((x, z)\) move block \(x\) from on top of block \(z\) to the table

precondition: clear \((x)\), on \((x, z)\)

effect: \(\neg\) on \((x, z)\), on table \((x)\); clear \((z)\)