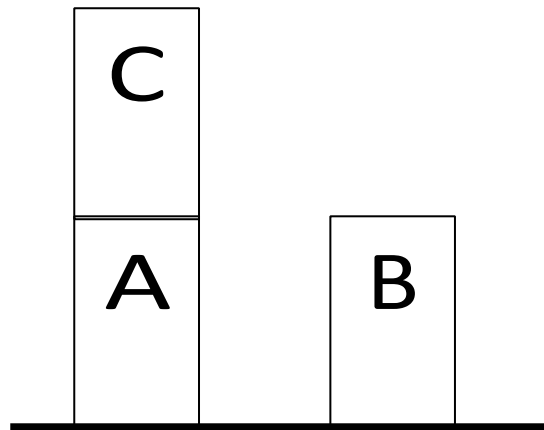## ARTIFICIAL INTELLIGENCE COMP813 M7

AI Planning Exercise

Given the blocks as arranged below, we want a plan to re-arrange it so that On(A,B), On(B,C) and OnTable(C) are true. Show the details of your planning process and your justification for why each operator is selected.

Furthermore, the plan so far is:

<div align="center">

On(A,B)
On(B,C)
OnTable(C)
On(A,B) & On(B,C) & OnTable(C)

Goal stack

</div>

Four operators are available for you:

Stack(x,y)	**Unstack(x,y)**
P: Clear(y) & Holding(x)	**P: On(x,y) & Clear(x) & Armempty**
D: Clear(y) & Holding(x)	**D: On(x,y) & Armempty**
A: Armempty & On(x,y)	**A: Holding(x) & Clear(y)**

Pickup(x)	**Putdown(x)**
P: Clear(x) & Ontable(x) & Armempty	**P: Holding(x)**
D: OnTable(x) & Armempty	**D: Holding(x)**
A: Holding(x)	**A: OnTable(x) & Armempty**