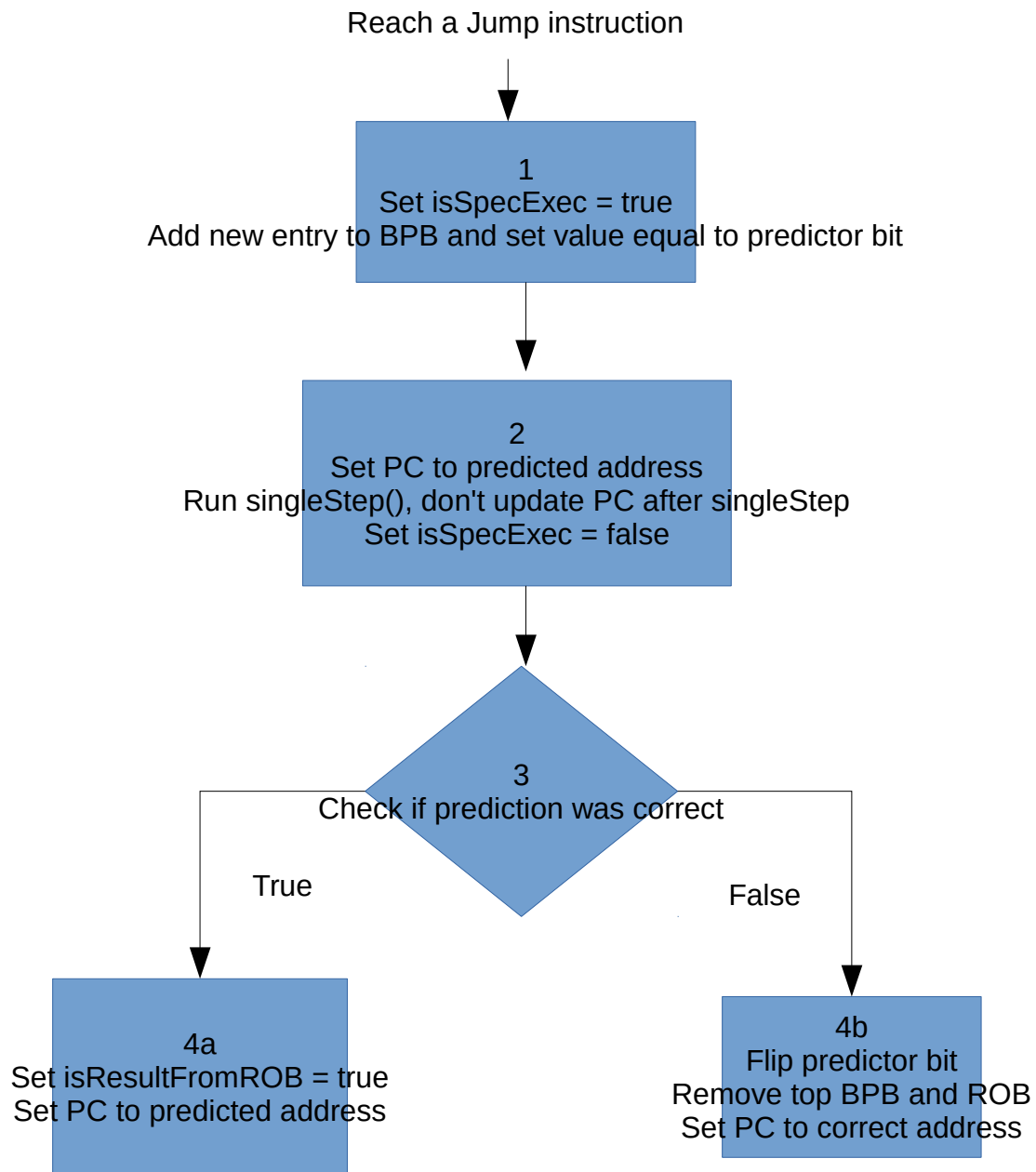MiniComputer Global variables:
Predictor bit = 0
IsSpecExec = false
IsResultFromROB = false
BPB = HashMap<String, integer>
ROB = LinkedList<ROB*>

Reach a Jump instruction

1
Set isSpecExec = true
Add new entry to BPB and set value equal to predictor bit

2
Set PC to predicted address
Run singleStep(), don't update PC after singleStep
Set isSpecExec = false

3
Check if prediction was correct

True

False

4a
Set isResultFromROB = true
Set PC to predicted address

4b
Flip predictor bit
Remove top BPB and ROB
Set PC to correct address

TODO:
-Create ROB class
-All instructions will check isSpecExec
-SingleStep will check isResultFromROB before
running instructions