Santiago Bermudez

i) Sort and Store Marbles

Pick marble from box.

[Marble is red] [Marble is green]

[Marble is blue]

Put in red box. Put in blue box. Put in green box.

[Still more marbles]

[else]

Pick green marble. Increment count for green marbles.

[Still more marbles] [else] Label box with color and marble count. Put marbles back.

Pick red marble. Increment count for red marbles.

[Still more marbles] [else] Label box with color and marble count. Put marbles back.

Pick blue marble. Increment count for blue marbles.

[Still more marbles] [else] Label box with color and marble count. Put marbles back.

Put sorted boxes in garage.

ii) Sort and Store Marbles

Pick marble from box.

[Marble is red]

[Marble is green]

[Marble is blue]

Increment count for red marbles. Increment count for blue marbles. Increment count for green marbles.

Put in red box. Put in blue box. Put in green box.

[Still more marbles]

[else]

Label box as red with count.

Label box as blue with count.
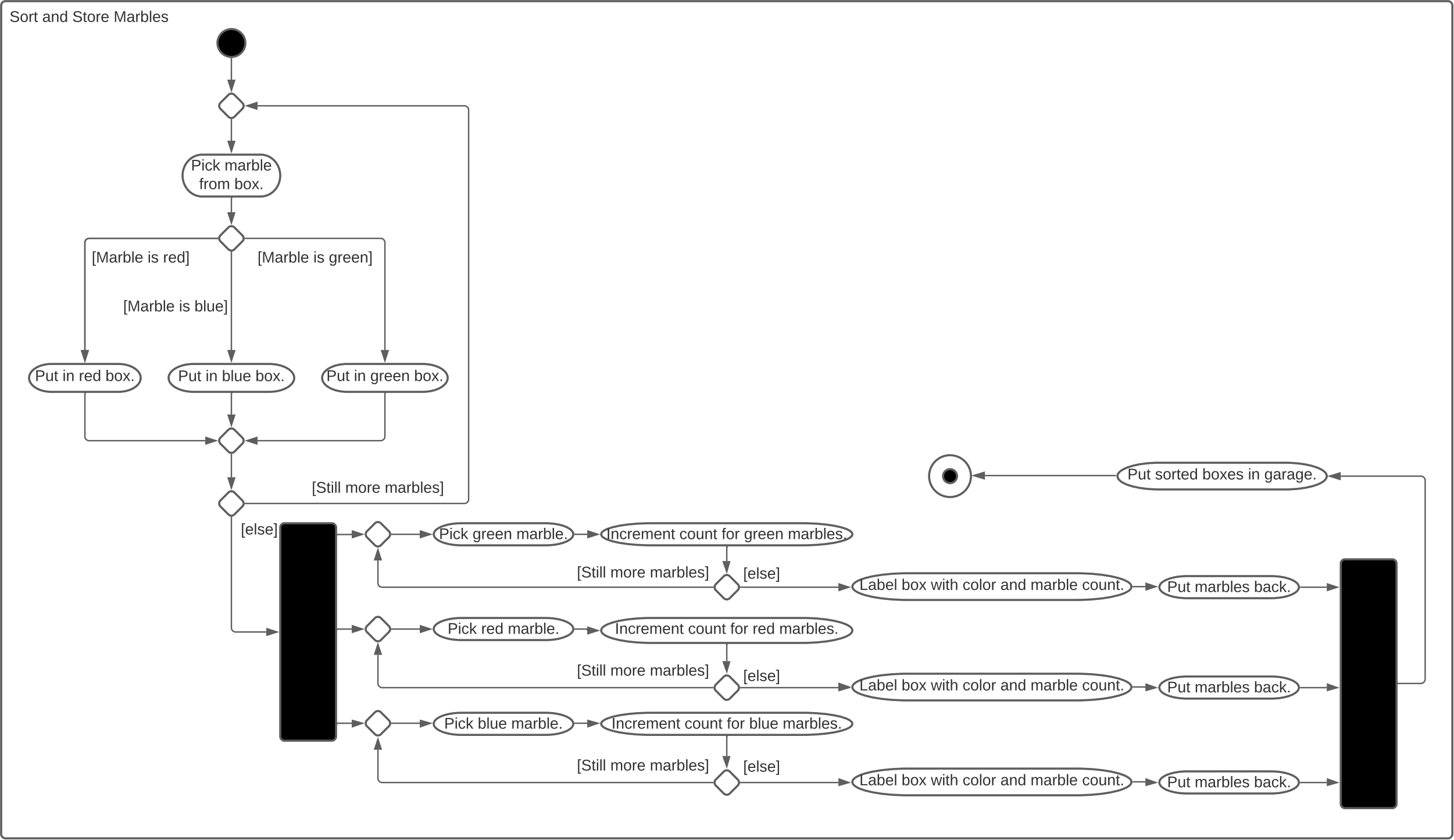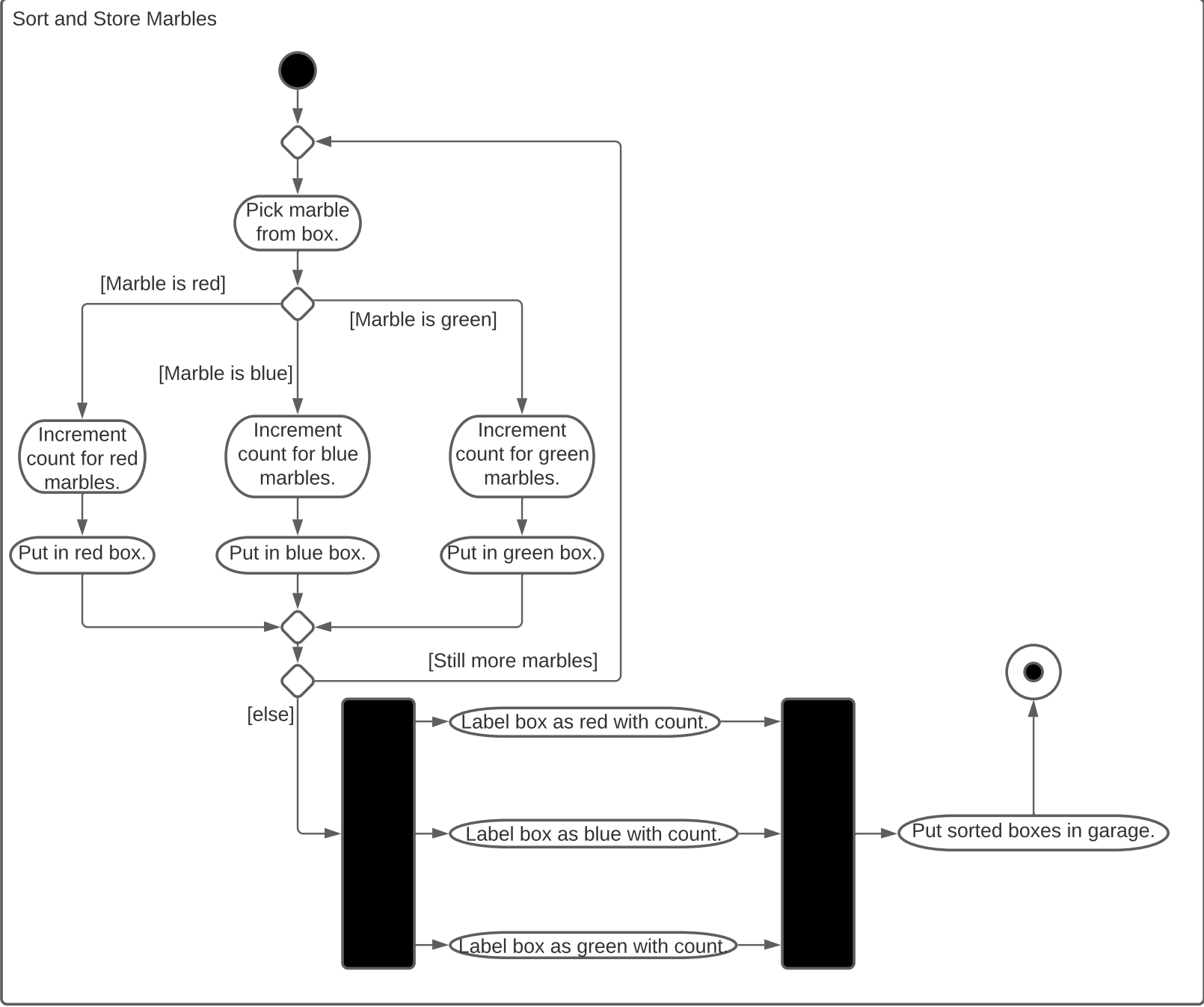
Label box as green with count.

Put sorted boxes in garage.

iii)

If three people can pick one marble each simultaneously from the initial single box, then I would use a process similar to the one I have drawn in part ii, but I would have those people perform that same process in parallel with each other. If I were to draw a diagram for that process, I would have fork and join nodes (*which are the black rectangles you see in part i) separating three identical instances (or sub-activties) of people picking and sorting marbles.