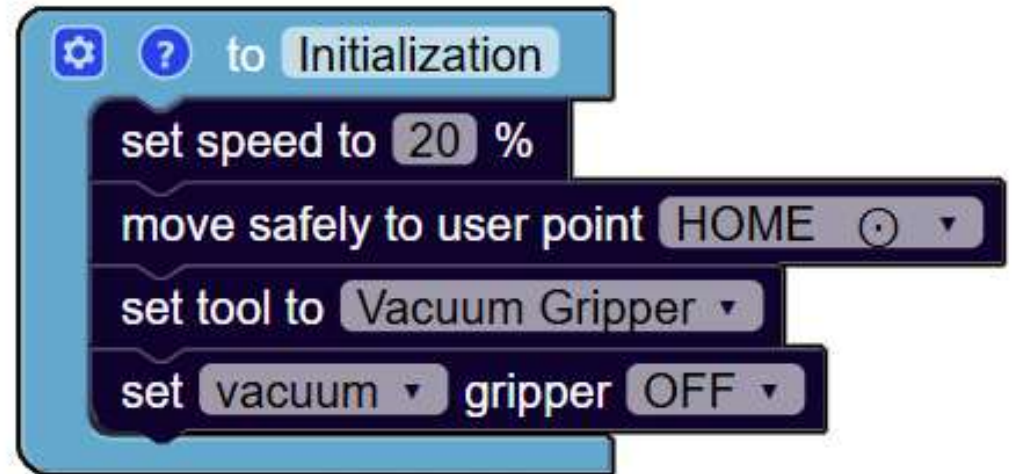
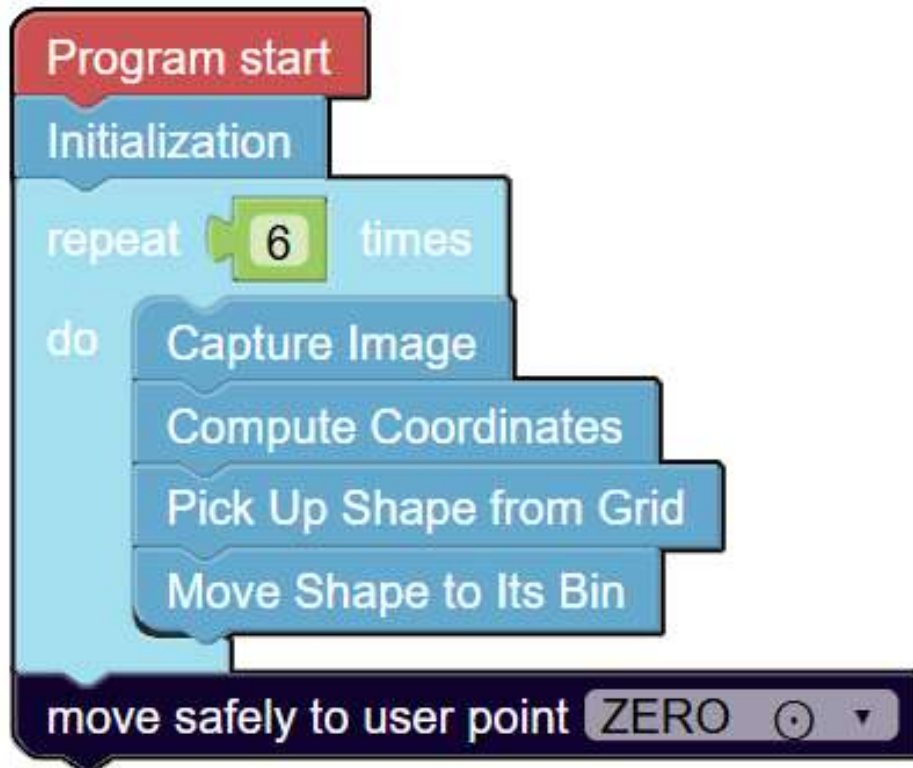


ORA AI-Guided Sorting and Coordinate Transformation Challenge

Ozobot Editor Blocks



The image shows a Scratch script with a 'Capture Image' block and a 'with LLM ask for' block. The 'with LLM ask for' block is configured to return a 'string' and has the 'use camera?' checkbox checked. The 'prompt' field contains a detailed instruction for an LLM to analyze a grid of lines and identify shapes within it.

to Capture Image

set dataFromLLM to with LLM ask for string

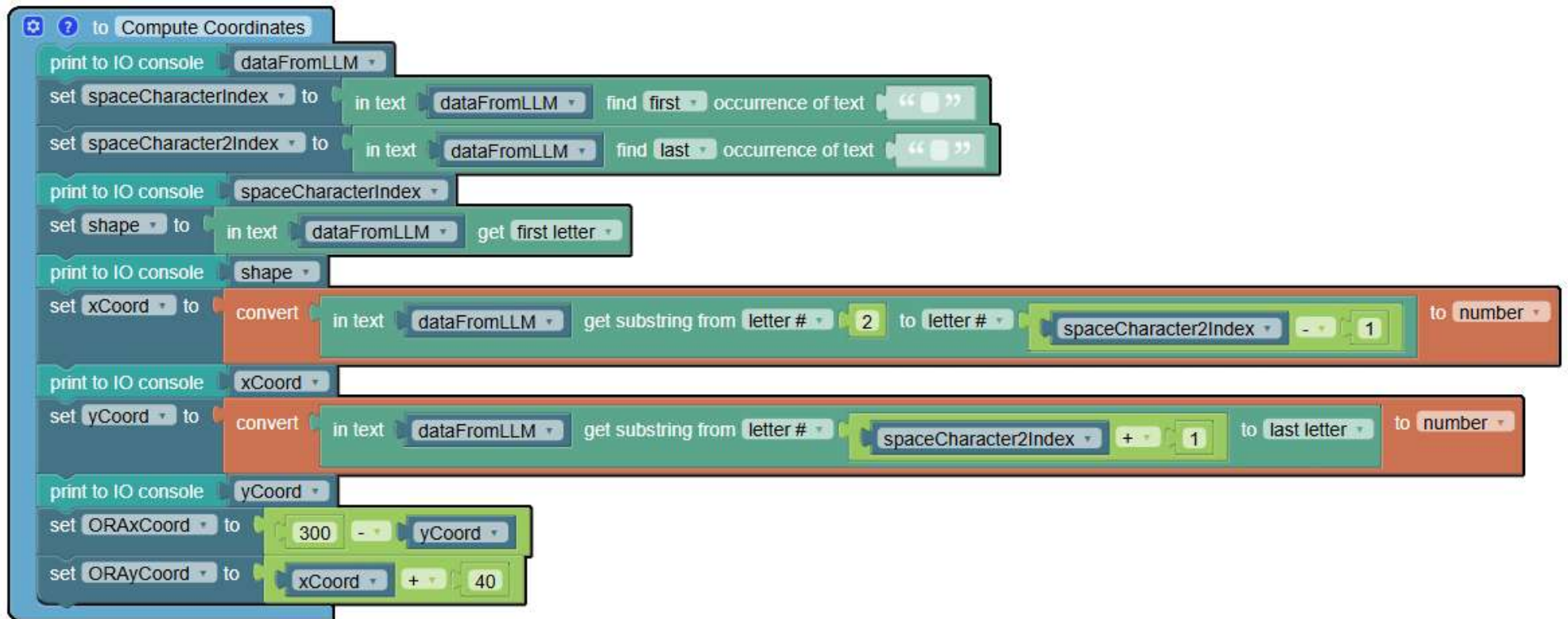
use camera? ☒

prompt:

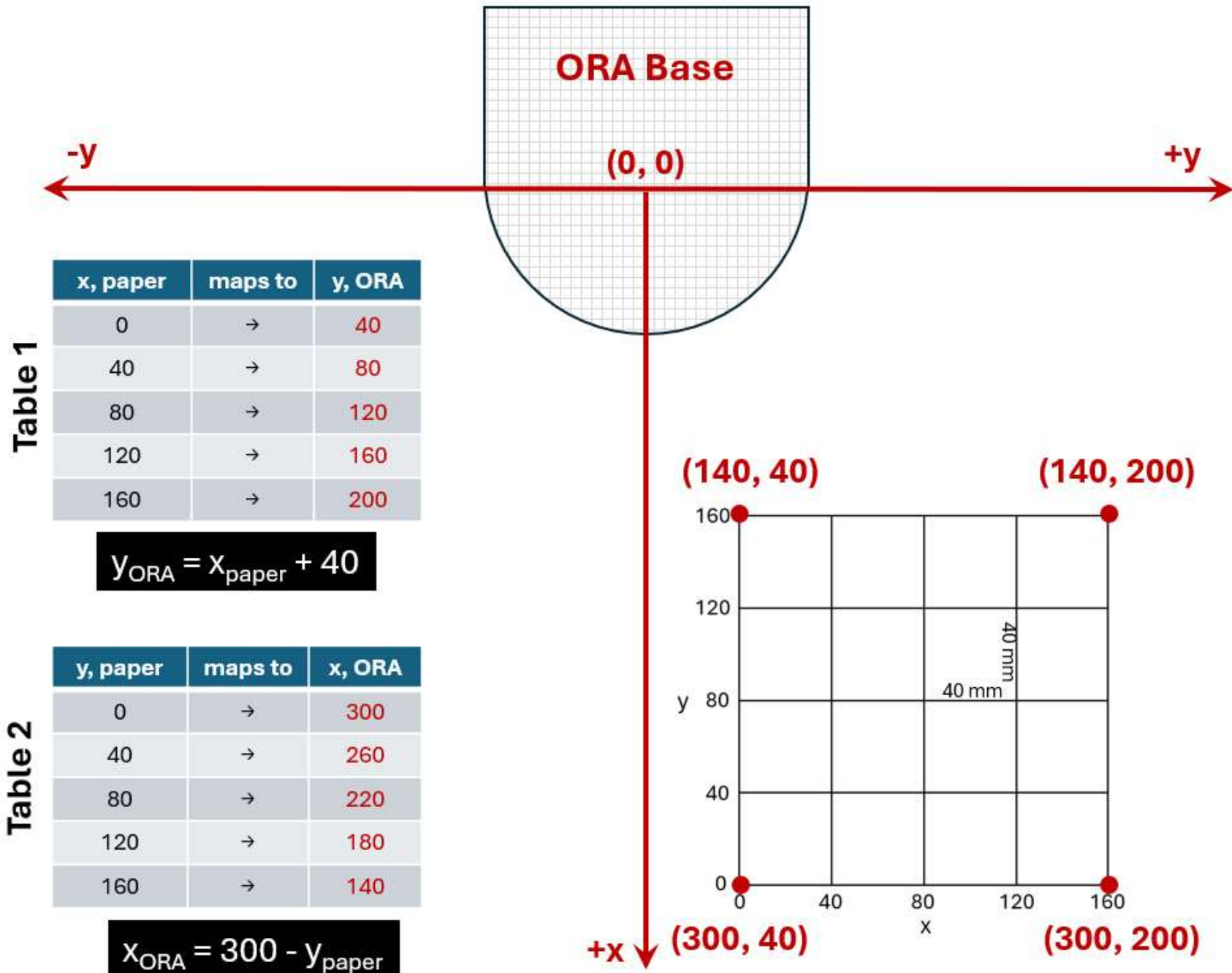
The horizontal lines have x coordinates as shown. The vertical lines have y coordinates as shown.
Find the x and y coordinates of the center of the black circle or square that is inside the grid. Return the following:

The letter C if a circle and the letter R if a rectangle followed by a blank space.

The coordinates separate by a blank space.



Coordinate Transformation



to Pick Up Shape from Grid

move to coordinate (x = ORAxCoord , y = ORAyCoord , z = 80) [mm]

with tool angle (roll = -180 , pitch = 0 , yaw =) [°]

movement type: linear

move to coordinate (x = ORAxCoord , y = ORAyCoord , z = -4) [mm]

with tool angle (roll = -180 , pitch = 0 , yaw =) [°]

movement type: linear

set vacuum gripper ON

move to coordinate (x = ORAxCoord , y = ORAyCoord , z = 80) [mm]

with tool angle (roll = -180 , pitch = 0 , yaw =) [°]

movement type: linear

to Move Shape to Its Bin

if `shape` = `"C"`

do

set `yPlaceLocation` to `-75`

else

set `yPlaceLocation` to `-225`

move to coordinate (x = `225` , y = `yPlaceLocation` , z = `80`) [mm]

with tool angle (roll = `-180` , pitch = `0` , yaw =) [°]

movement type: `linear`

move to coordinate (x = `225` , y = `yPlaceLocation` , z = `10`) [mm]

with tool angle (roll = `-180` , pitch = `0` , yaw =) [°]

movement type: `linear`

set `vacuum` gripper `OFF`

move to coordinate (x = `225` , y = `yPlaceLocation` , z = `80`) [mm]

with tool angle (roll = `-180` , pitch = `0` , yaw =) [°]

movement type: `linear`