



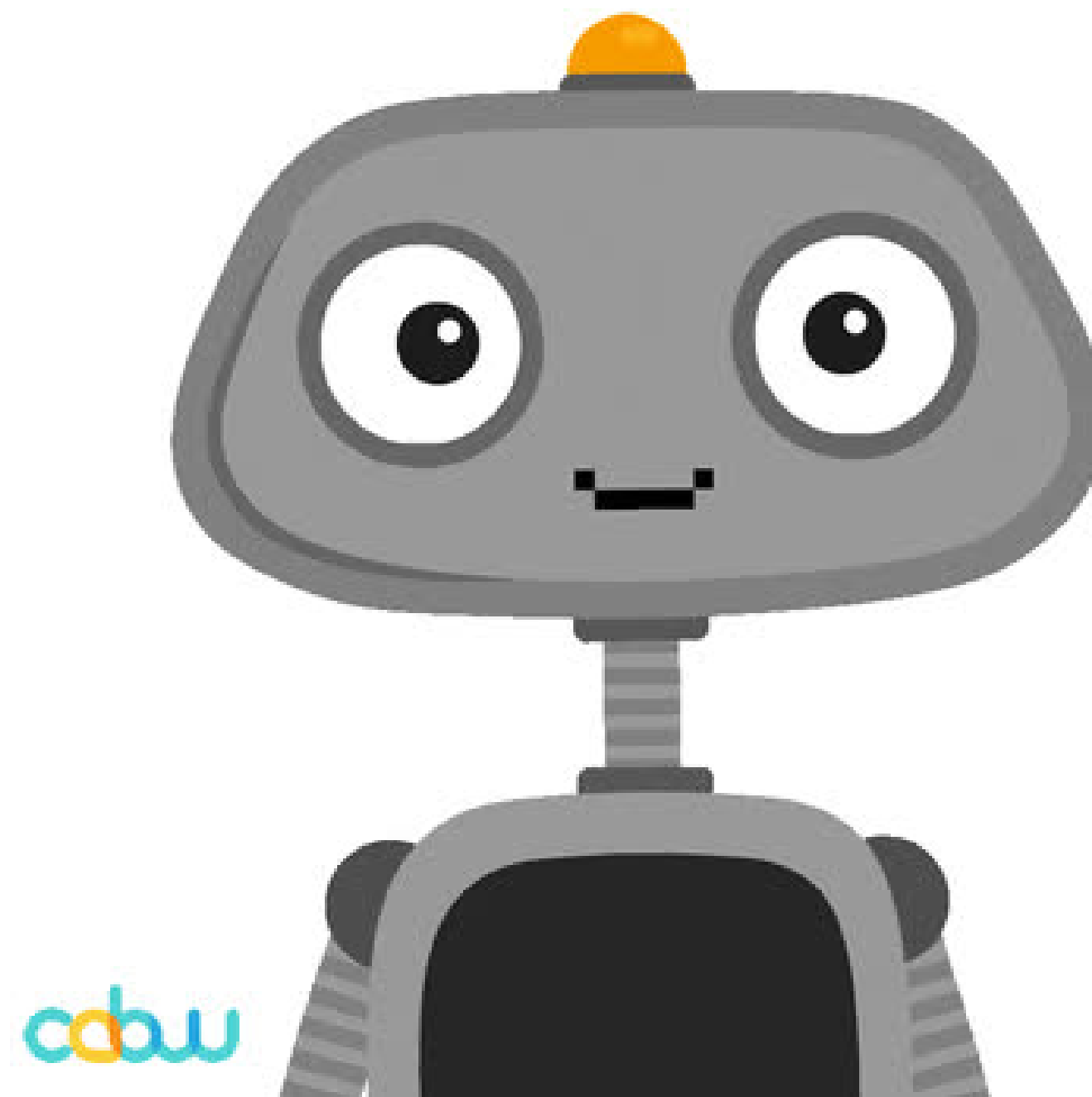
Hackathon Task Overview and Webots 101

Together, Stronger!

Contents

1. Introduction and My Journey in Robotics
2. Tasks Overview
3. Task 1 [Trace Square]
4. Task 2 [Trace Sin]
5. Task 3 [Trace Spiral]
6. Task 4 [Be creative]
7. Scoring Matrix
8. Webots Setup

Task Overview with Harsh Kakashaniya



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Journey with Robotics



Design Engineer
2016

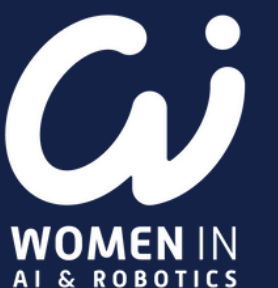


Masters in Robotics
2020



Manager, Robotics and Automation
Mobile Robots (AMRs)

Together, Stronger!



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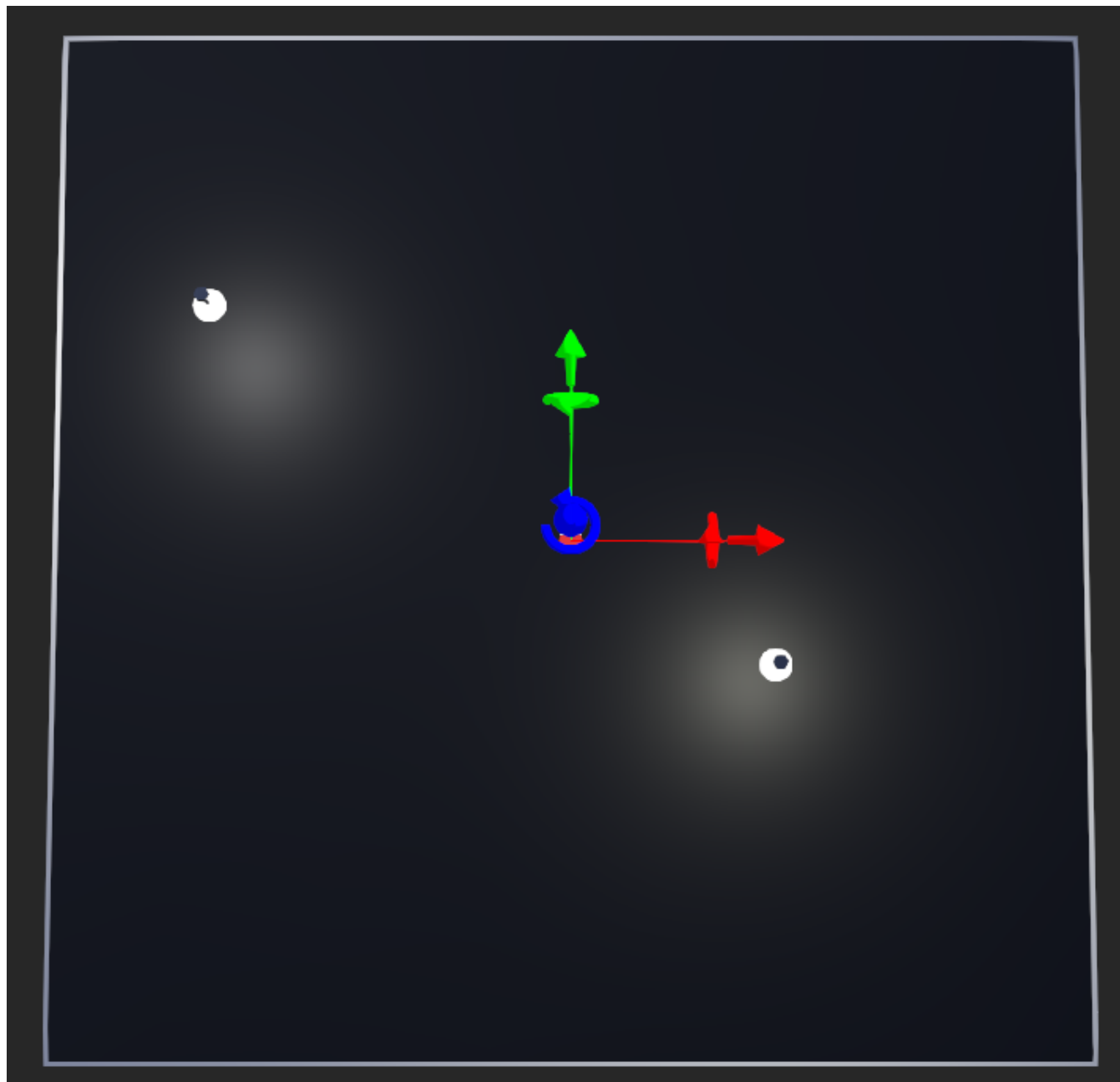
5. Task 3 [Trace Spiral]

6. Task 4 [Be creative]

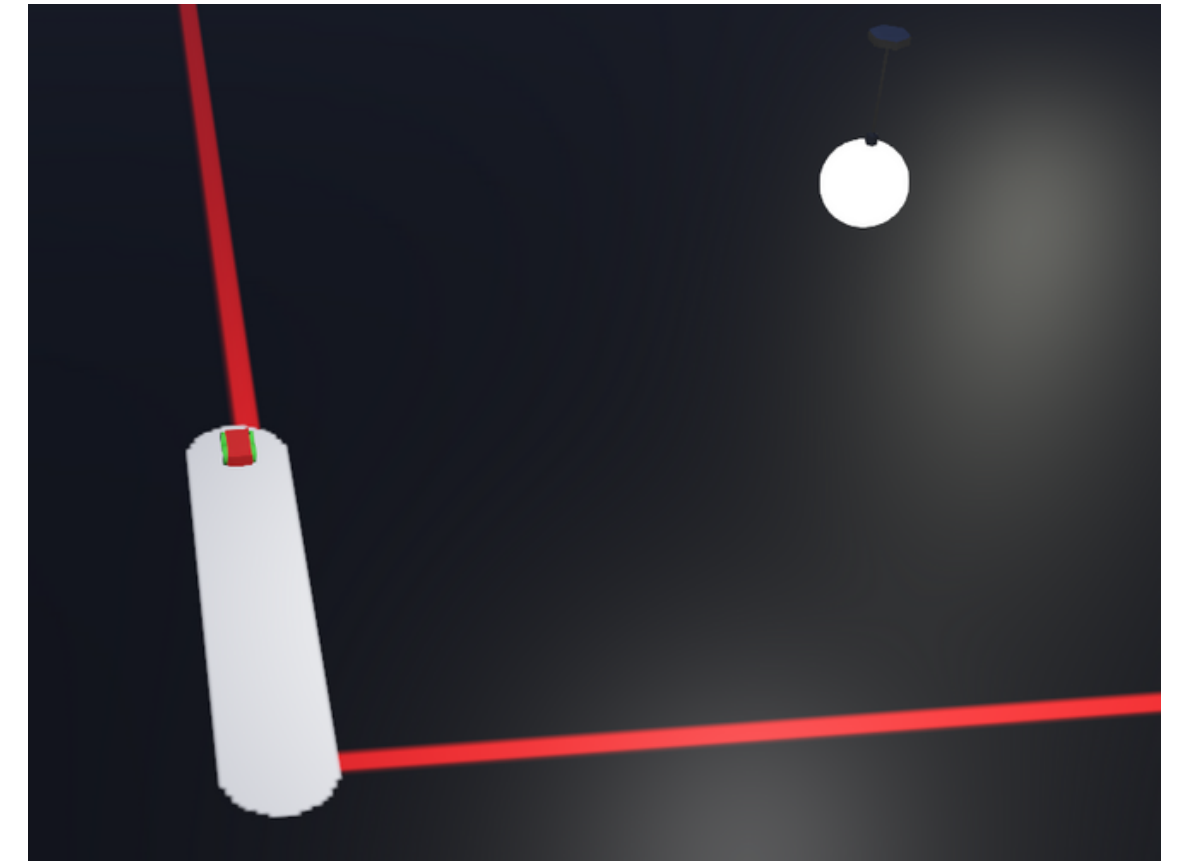
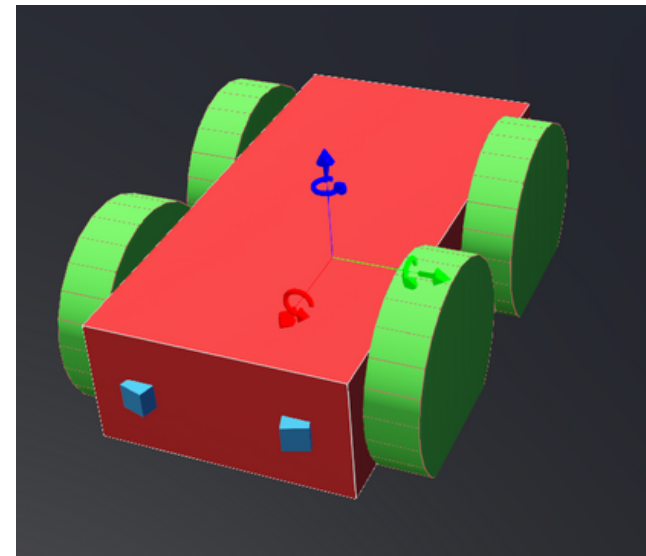
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Task Overview



10m x 10m

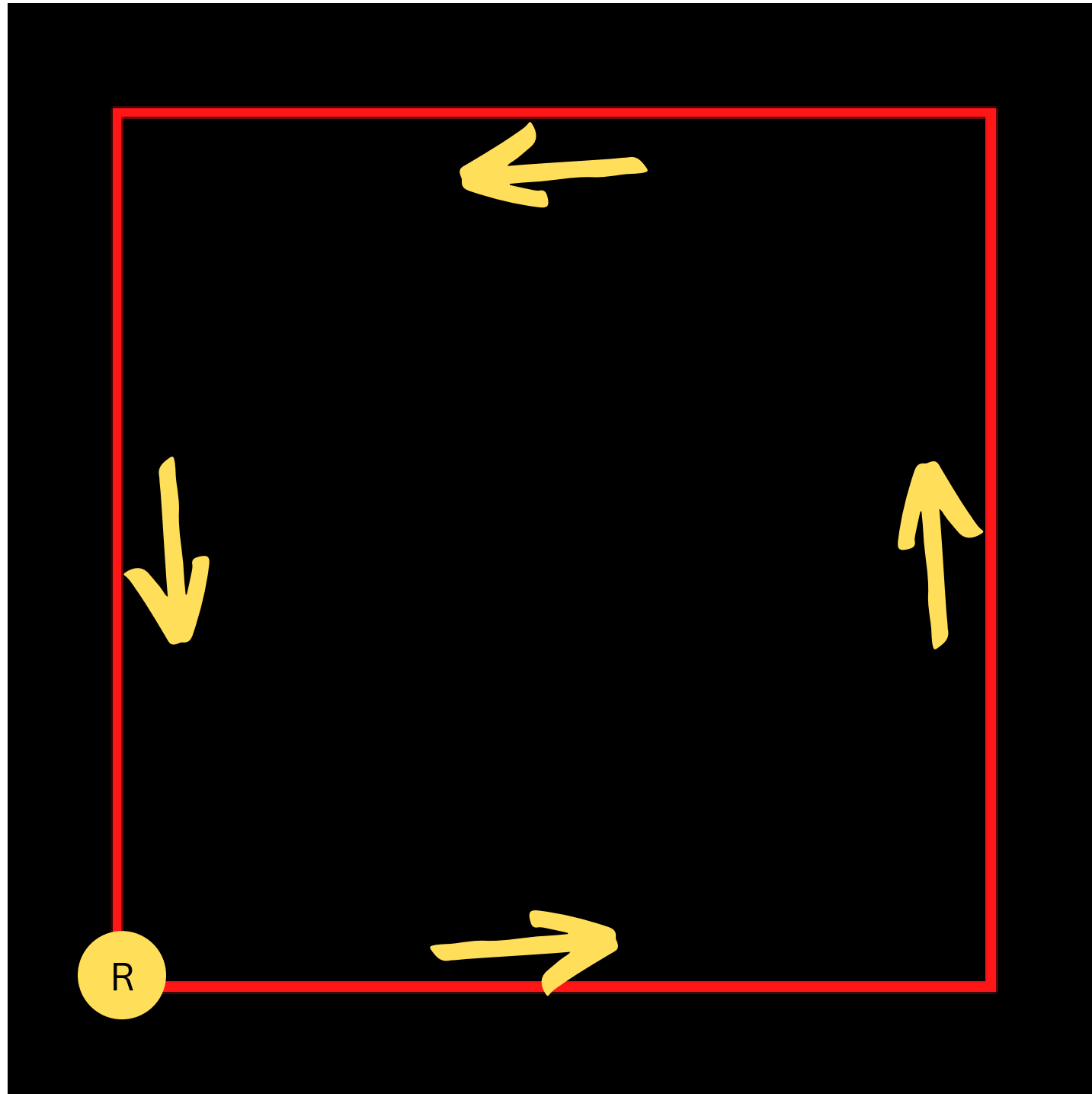


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Task 1 (Trace Square curve)

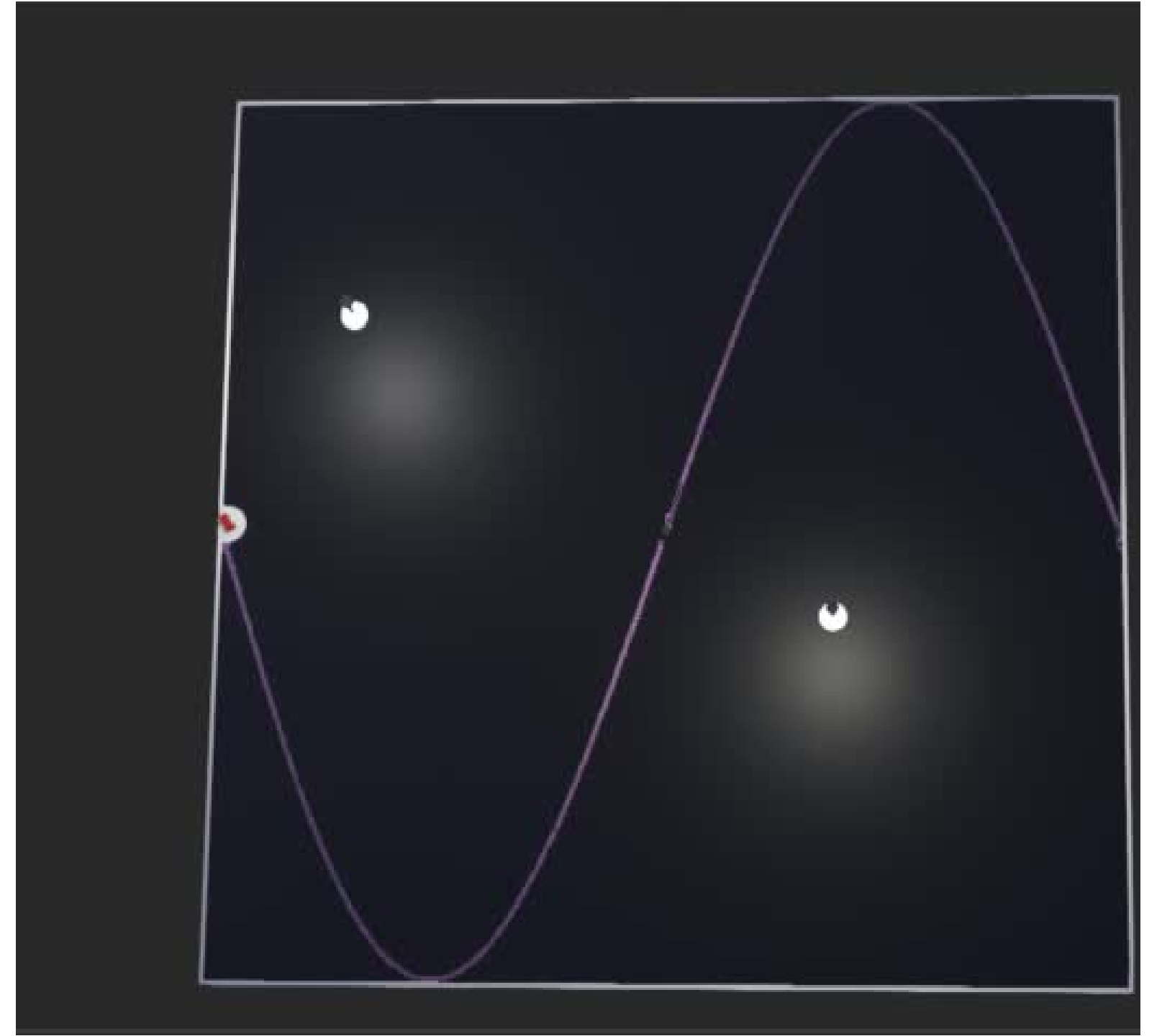
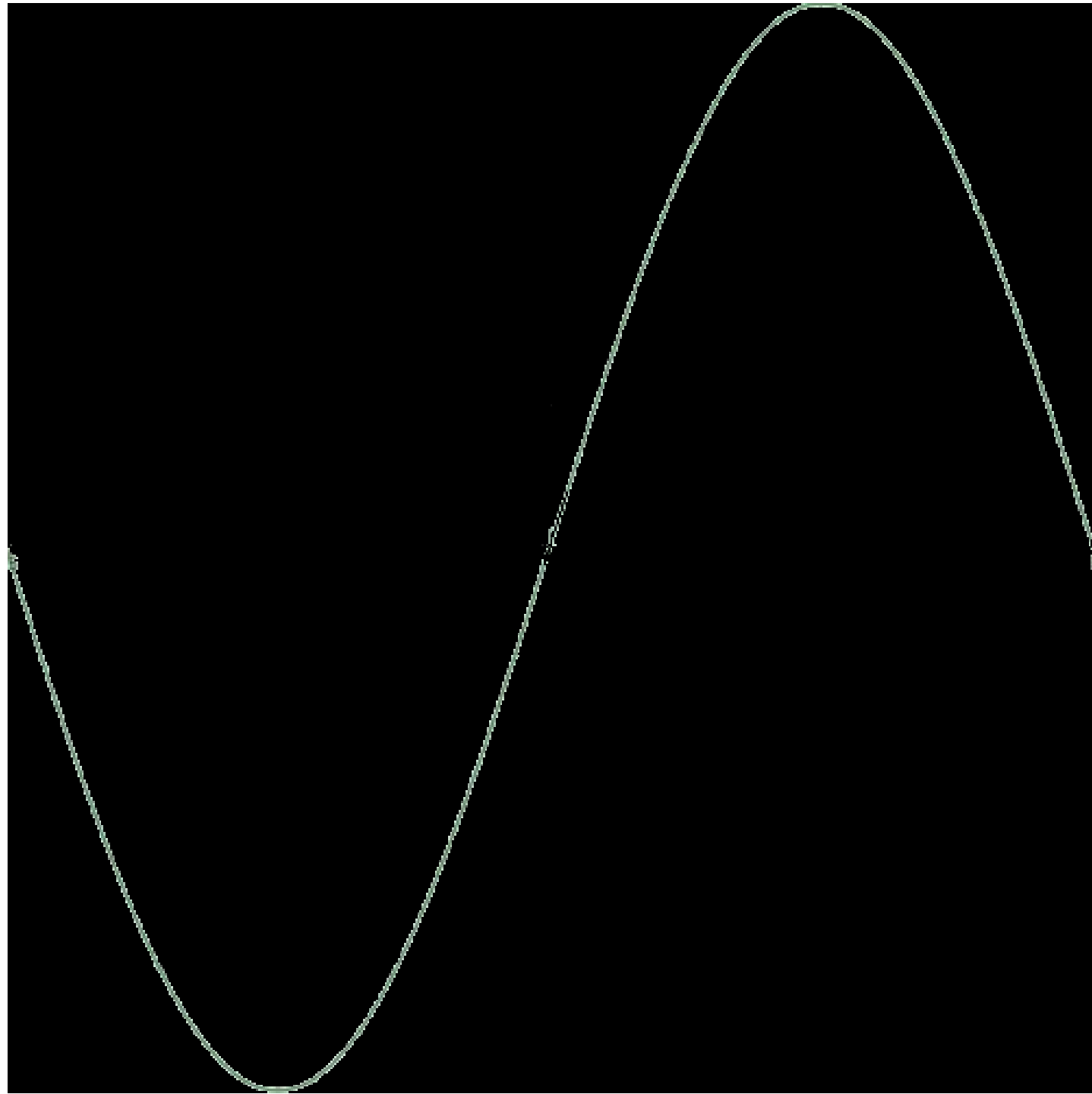


Trace
the
curve!

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Task 2 (Trace Sin curve)

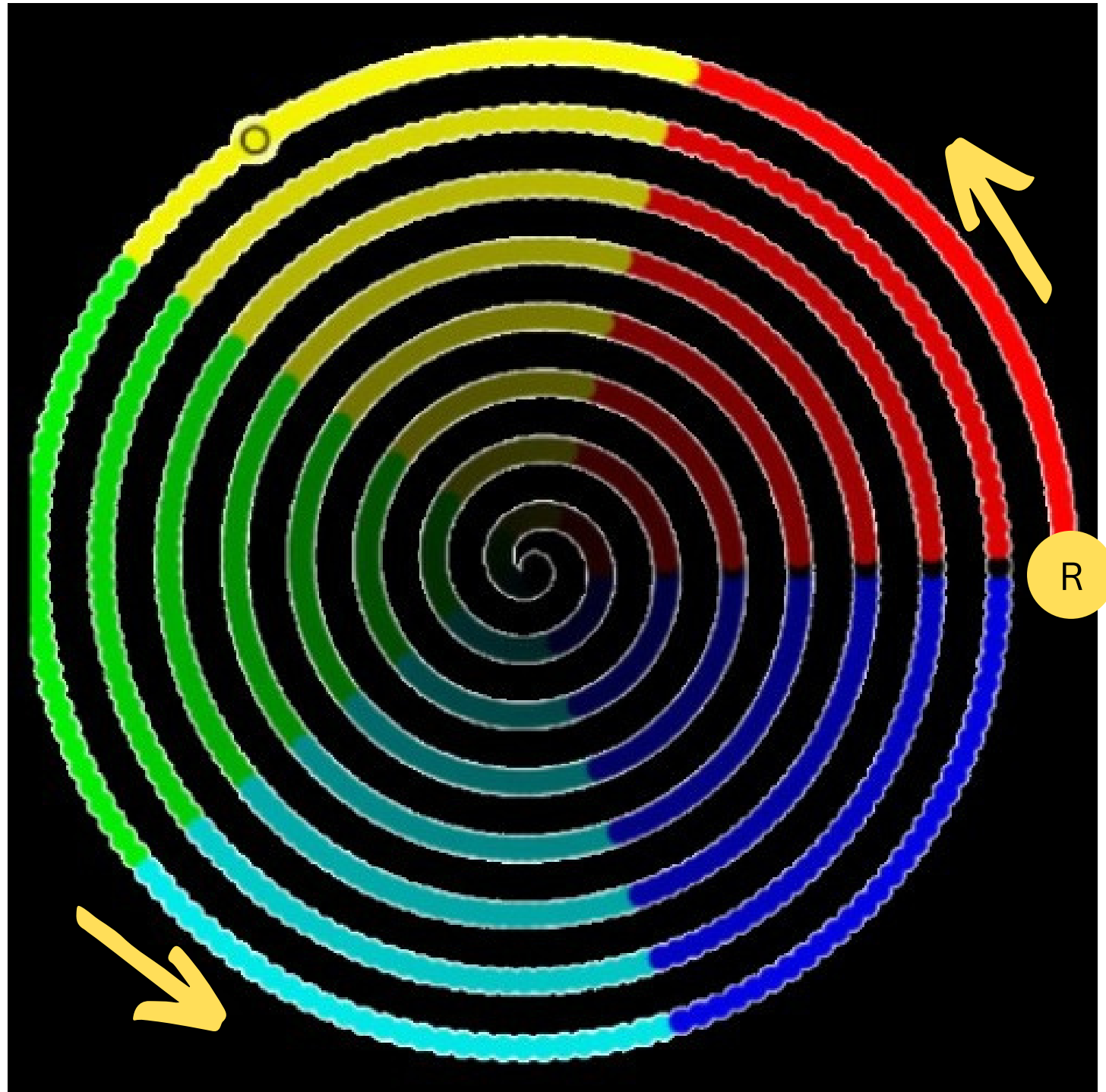


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Task 3 (Trace Spiral curve)



*challenging
curve
tracing*

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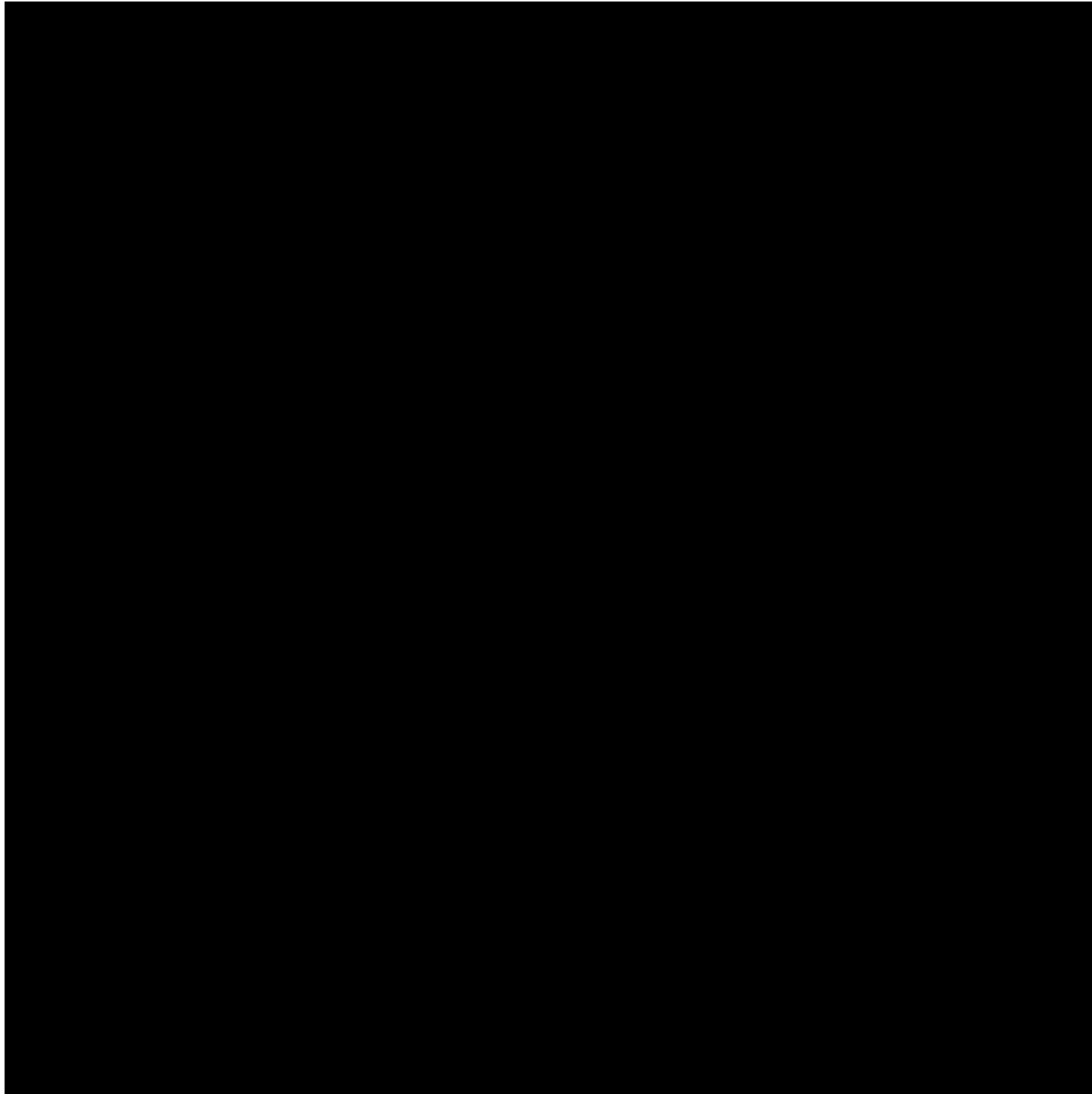
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Task 4 (Create your art work)

Wear your creativity hat

1. Implement Keyboard operated robot.
2. Trigger autonomous functions with a key.
3. Try to draw a theme using the keyboard and autonomous functions.
4. Remember "p" is used to "paint" and "o" is used to "Off".

Task 4



Example sudo code

if up arrow pressed:

go up

else if down arrow pressed:

go down

else if "c" key pressed:

make a circle

else if "l" key pressed:

make a line

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TASKS AND SCORES

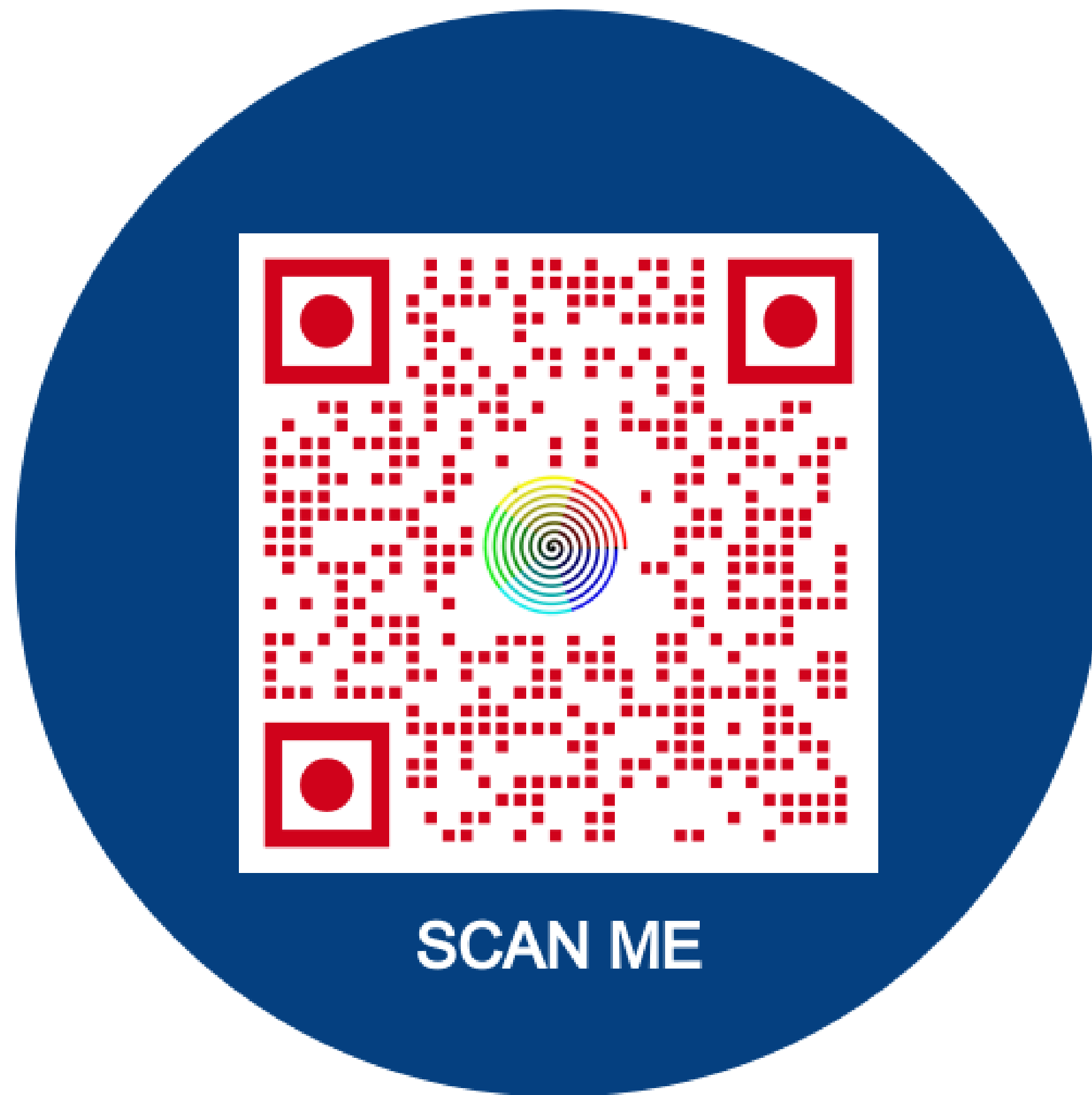
Task 1 (Square)	15
Task 2 (Sin)	20
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Task 4 (Canvas task)	30
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LET'S MOVE TO WEBOTS



RESOURCE LINK

Questions?

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Thank you for your attention!