

STUDENT FIRST NAME / LAST NAME: _____

CLASS: _____

ALGORITHM EXAM #2

1h

SCORE	/ 100
COMMENT	

WARNING /\

YOU NEED TO CHECK CAREFULLY STEP BY STEP THAT YOUR CODE WORKS

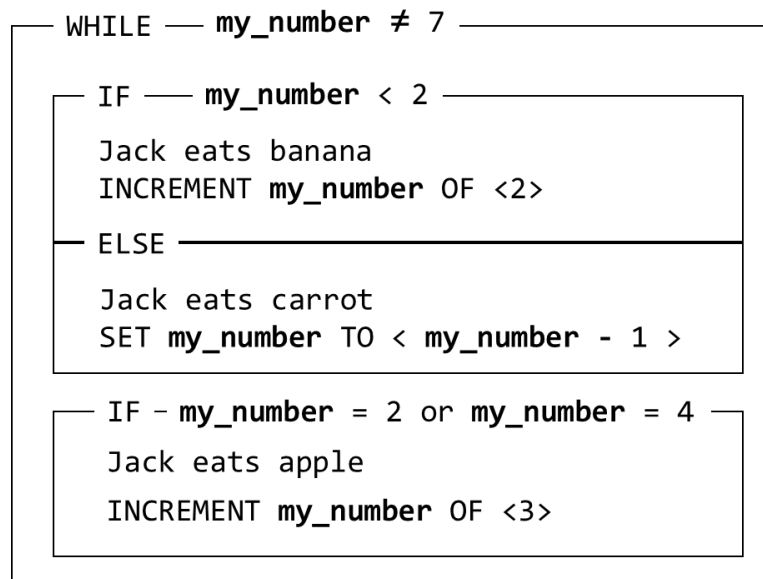
If you code does not work, you will get a 0 score

DO NOT USE INSTRUCTION OR CONDITION THAT ARE NOT ALLOWED

Exercise 1 (15 POINTS)

Complete the table. Use a new line every time my_number changes

SET <my_number> to < 0 >



my_number	What Jack eats?
0	
2	banana

Exercise 2 (15 POINTS)

Draw the path of Jack (with arrows \longrightarrow \downarrow)

SET `<my_variable>` to `< 0 >`

WHILE `my_variable < 3`

REPEAT `<my_variable>` times

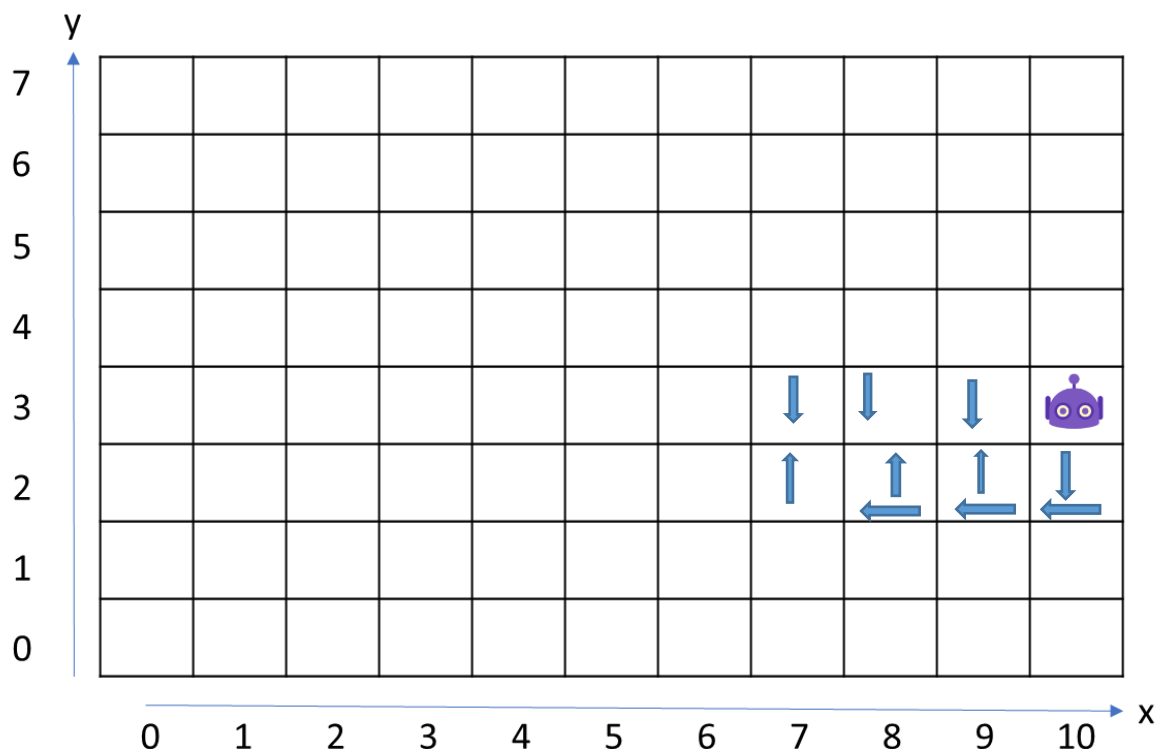
Go down

REPEAT `<my_variable + 1>` times

Go left

Go up

INCREMENT `<my_variable>` OF `<1>`



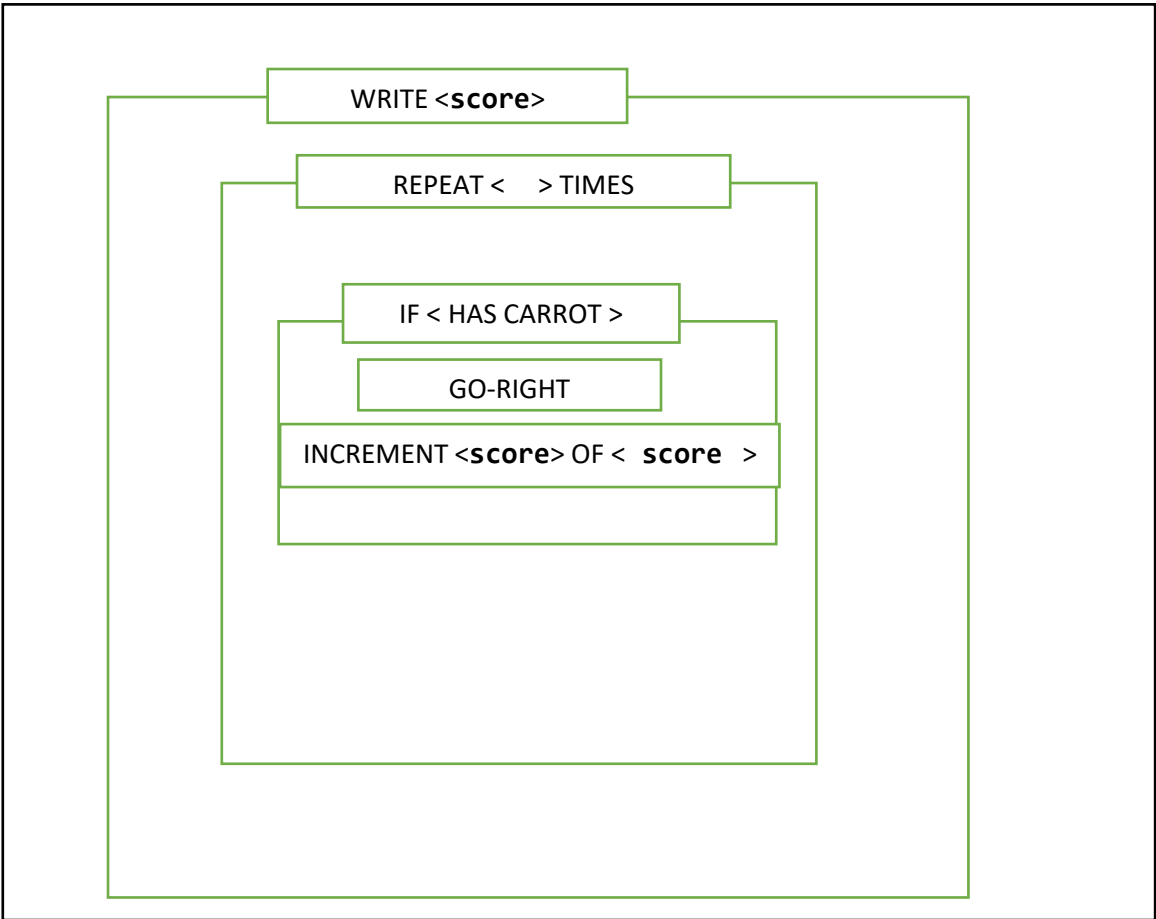
Exercise 3 (25 POINTS)

Objective	<ul style="list-style-type: none">Count the score: If has cell diamond: +2 points If has cell carrot: +3 pointsWrite the score on the last cell <p>Warning: your code must work for the 2 cases!!!!</p>
Maximum number of instructions	10
Allowed instructions	GO-RIGHT SET <score> TO < > INCREMENT <score> OF < > REPEAT < > TIMES <score> IF <CONDITION> IF <CONDITION> ELSE WRITE <score>
Allowed conditions	<HAS CARROT> <HAS DIAMOND>

CASE 1

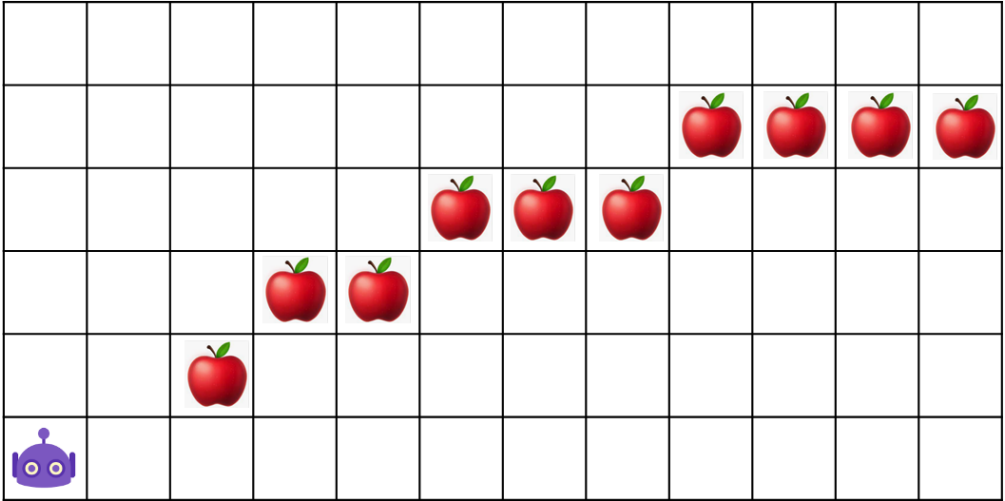


CASE 2



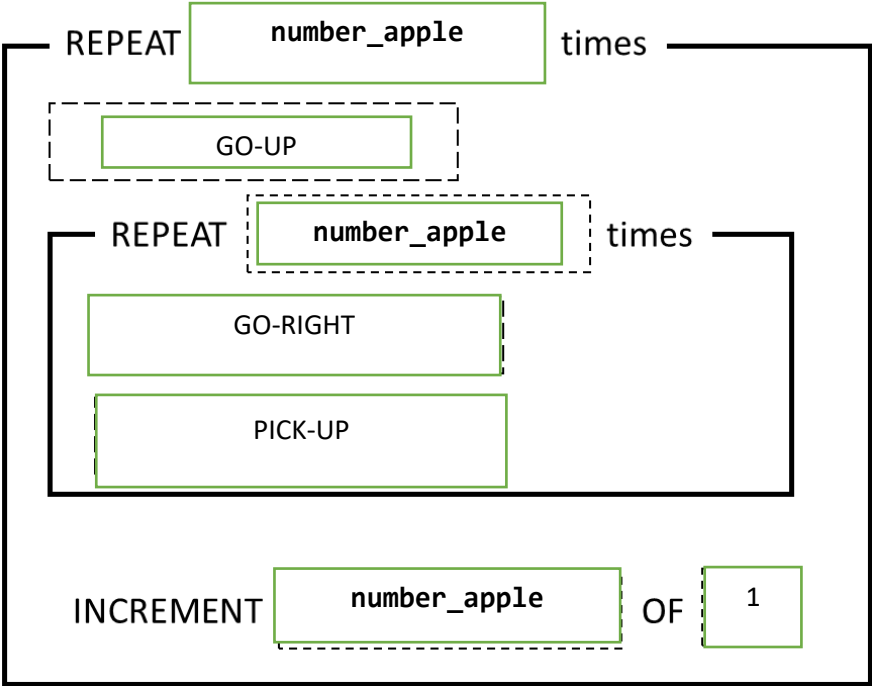
Exercise 4 (20 POINTS)

Objective	<ul style="list-style-type: none">Pick up all apples
Allowed instructions	GO-RIGHT GO-UP PICK-UP IF <CONDITION> SET <number_apple> TO < > IF <CONDITION> ELSE INCREMENT <number_apple> OF < > REPEAT < > TIMES WRITE < number_apple > < number_apple > WHILE <CONDITION>
Allowed conditions	NO CONDITION ALLOWED






SET **number_apple** to 0


GO-RIGHT




Exercise 5 (25 POINTS)

Objective	<ul style="list-style-type: none">For each lines: there is a number N. Paint N cells on the right side this numberBut if cell has a cross, do not pain the cell <p>For instance , for case 1 , the result will be :</p> <table><tr><td></td><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> <p><u>Warning: your code shall work for the 2 cases!!!!</u></p>		4									2									5									6																
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	2																																													
	5																																													
	6																																													
Max number of instructions	10																																													
Allowed instructions	<div>GO-RIGHT GO LEFT GO DOWN GO UP PAINT</div> <div>REPEAT < > TIMES</div> <div><u>Variables:</u> SET <number_of_paint> TO < > <number_of_paint> <VALUE ON CELL></div>																																													
Allowed conditions	<i>NO CONDITION ALLOWED</i>																																													

CASE 1

	4							
	2							
	5							
	6							

CASE 2

	3							
	1							
	8							
	4							

