QUIZZ   {1h00}

STUDENT FIRST NAME / LAST NAME:

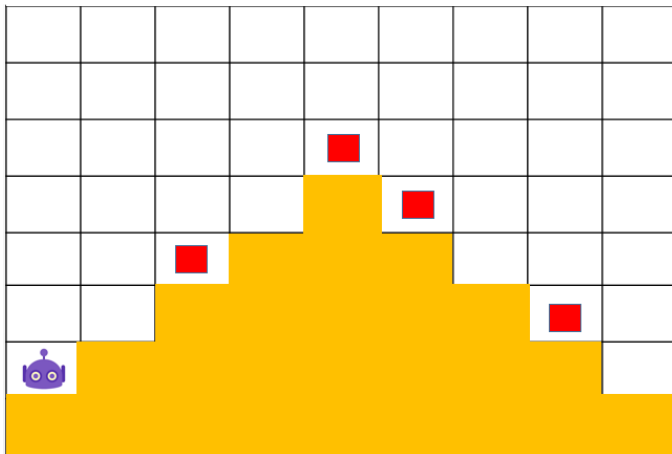---

WARNING

YOU NEED TO CHECK CAREFULLY STEP BY STEP THAT YOUR <u>CODE WORKS</u>

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

Exercise 1: (25 POINTS)

Objective	Pick up all diamonds
Maximum number of instructions	10
Allowed instructions	GO-UP GO-DOWN GO-LEFT GO-RIGHT PICK-UP IF REPEAT N-TIME WHILE
Allowed conditions	<HAS DIAMOND>


```
REPEAT 4
    GO UP
    GO RIGHT
    IF <HAS DIAMOND>
        PICK UP
```
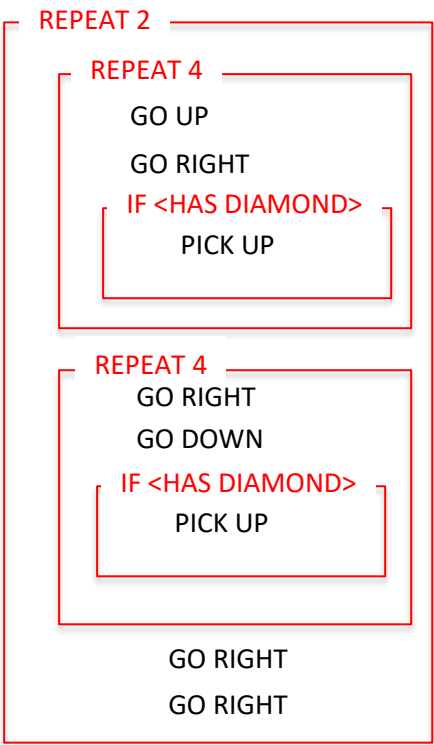
```
REPEAT 3
    GO RIGHT
    GO DOWN
    IF <HAS DIAMOND>
        PICK UP
```

Exercise 2: (25 POINTS)

Objective	Pick up all diamonds
Maximum number of instructions	14
Allowed instructions	GO-UP GO-DOWN GO-LEFT GO-RIGHT PICK-UP IF REPEAT N-TIME WHILE
Allowed conditions	<HAS DIAMOND>


```
REPEAT 2
    REPEAT 4
        GO UP
        GO RIGHT
        IF <HAS DIAMOND>
            PICK UP

    REPEAT 4
        GO RIGHT
        GO DOWN
        IF <HAS DIAMOND>
            PICK UP

    GO RIGHT
    GO RIGHT
```
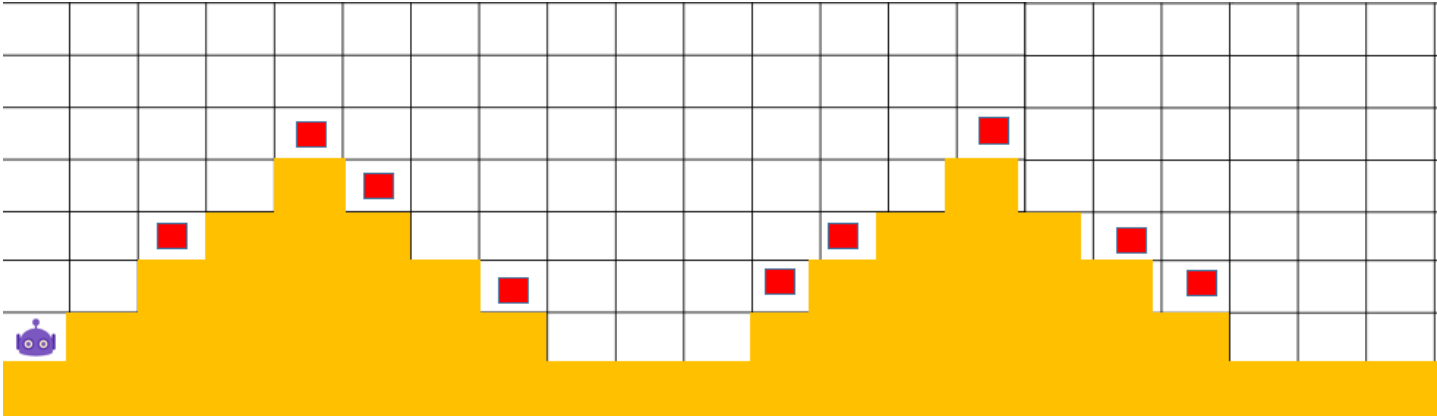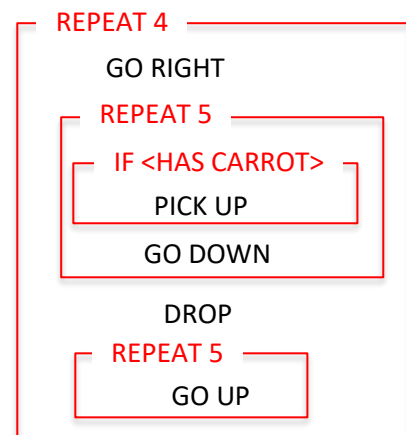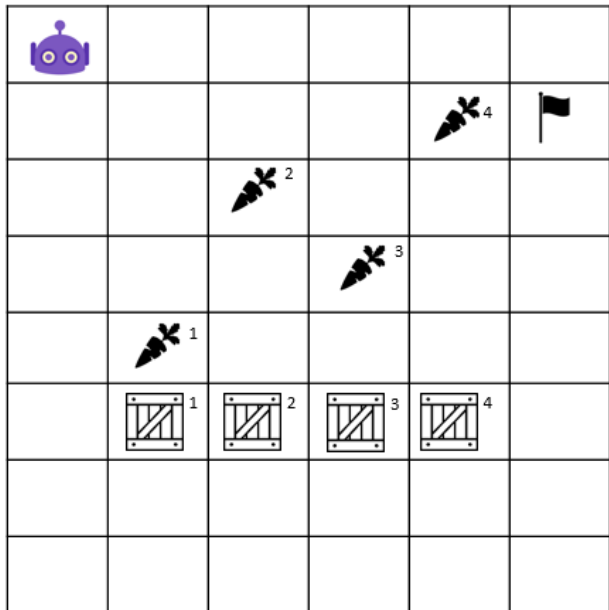
Exercise 3: (25 POINTS)

Objective	Bring all carrots to their respective box
Maximum number of instructions	13
Allowed instructions	GO-UP GO-DOWN GO-LEFT GO-RIGHT PICK-UP DROP IF REPEAT N-TIME WHILE
Allowed conditions	<HAS CARROT>


```
REPEAT 4
    GO RIGHT
    REPEAT 5
        IF <HAS CARROT>
            PICK UP
        GO DOWN
    DROP
    REPEAT 5
        GO UP
```

Exercise 4: (25 POINTS)

- **Flag:** ទង់ជាតិ

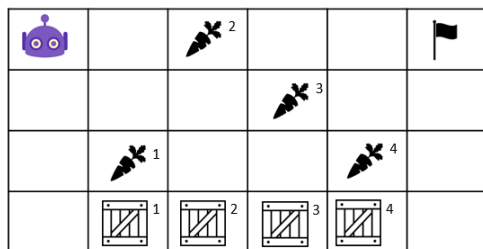| Objective	Bring all carrot to their respective box **and** stop at the flag!! WARNING : you program must work for the 2 cases !!!
Maximum number of instructions	10
Allowed instructions	GO-UP GO-DOWN GO-LEFT GO-RIGHT PICK-UP DROP IF REPEAT N-TIME WHILE
Allowed conditions	<HAS CARROT> <HAS FLAG> <HAS **NO** FLAG>

CASE 1   CASE 2

WHILE – HAS NO FLAG
  GO RIGHT
  REPEAT 3
    IF – HAS CARROT
      PICK UP
    GO DOWN
  DROP
  REPEAT 3
    GO UP