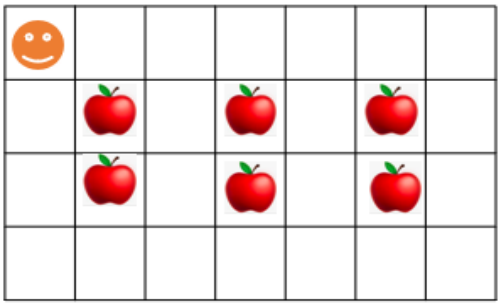
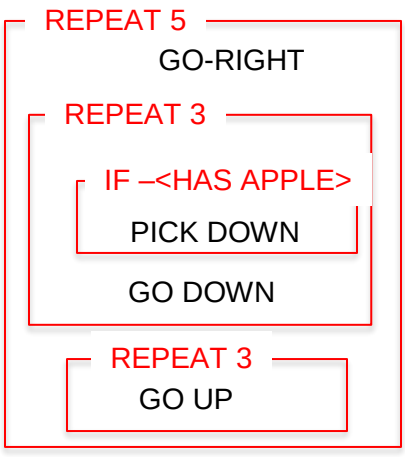
ACTIVITIES

EXERCICE 1:

Objective	Take all the apples.
Maximum number of instructions	8
Allowed instructions	GO-UP GO-DOWN GO-LEFT GO-RIGHT PICK-UP REPEAT N-TIME WHILE IF
Allowed conditions	<HAS APPLE>

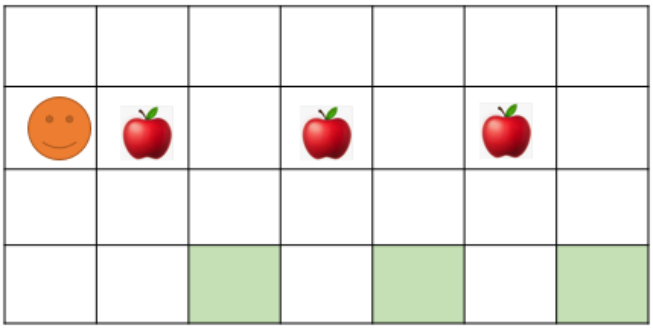


Answer:



EXERCICE 2:

Objective	Bring all apples to their respective green box.
Maximum number of instructions	10
Allowed instructions	GO-UP GO-DOWN GO-LEFT GO-RIGHT PICK-UP DROP REPEAT N-TIME WHILE IF
Allowed conditions	<HAS APPLE>

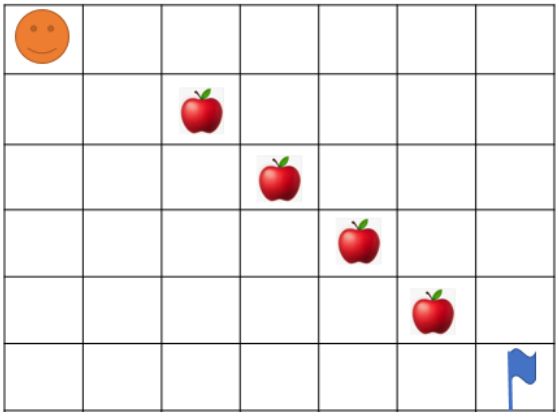


Answer:

REPEAT 3
- GO RIGHT
- PICK UP
- GO RIGHT
- REPEAT 2
  - GO DOWN
- DROP
- REPEAT 2
  - GO UP

EXERCICE 3:

Objective	Pick up all apple and stop at the flag!!
Maximum number of instructions	6
Allowed instructions	GO-UP GO-DOWN GO-LEFT GO-RIGHT PICK-UP IF REPEAT N-TIME WHILE
Allowed conditions	<HAS APPLE> <HAS FLAG> <HAS **NO** FLAG>



Answer:

REPEAT 5

GO RIGHT

GO DOWN

IF—<HAS APPLE>

PICK UP

GO RIGHT

EXERCICE 4:

What happen at the end?

- How many carrots Jack eats ?
- How many bananas Jack eats?
- Where will be Jack at the end?

answer

- Jack ate 2 cottots.
- Jack didn't ate banana.
- In the end Jack stay in cell number 2.

REPEATE 2 TIMES

IF RED **OR** BANANA

EAT

ELSE

IF CARROT

EAT

ELSE

GO

IF YELLOW

GO

ELSE

IF GREEN

GO FORWARD

ELIF BLUE

EAT BANANA

ELSE

GO LEFT

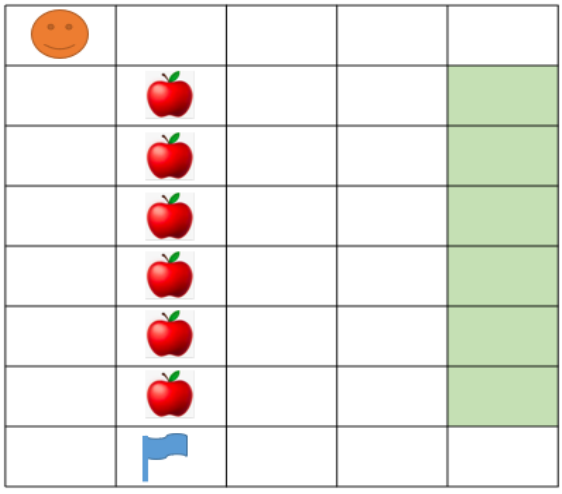
EXERCICE 5:

Objective	Bring all apple to green 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 APPLE> <HAS CELL DOWN> <HAS FLAG> <HAS **NO** FLAG>

Case1:

=

Case 2:



Be careful NOT to pick up the flag

Answer:

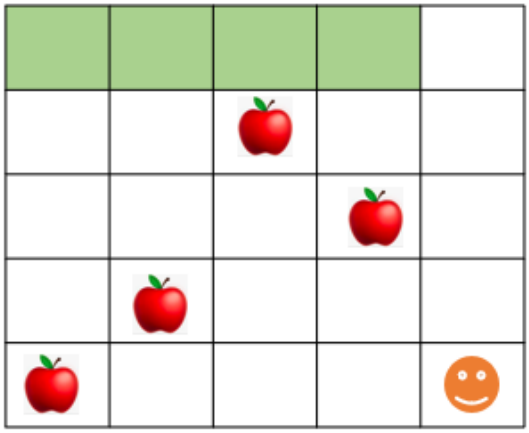
GO RIGHT

WHILE—<HAS CELL DOWN>
GO DOWN
IF HAS APPLE
PICK UP
REPEAT 3
GO RIGHT
DROP
REPEAT 4
GO LEFT

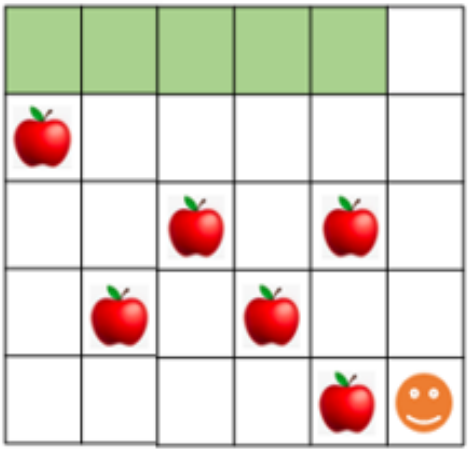
EXERCICE 6:

Objective	Take all the apple to green box WARNING: you program must work for the 2 cases!!!
Maximum number of instructions	15
Allowed instructions	GO-UP GO-DOWN GO-LEFT GO-RIGHT PICK-UP DROP IF REPEAT N-TIME WHILE
Allowed conditions	<HAS APPLE> <HAS CELL ON RIGHT> <HAS CELL ON LEFT>

Case 1:



Case 2:

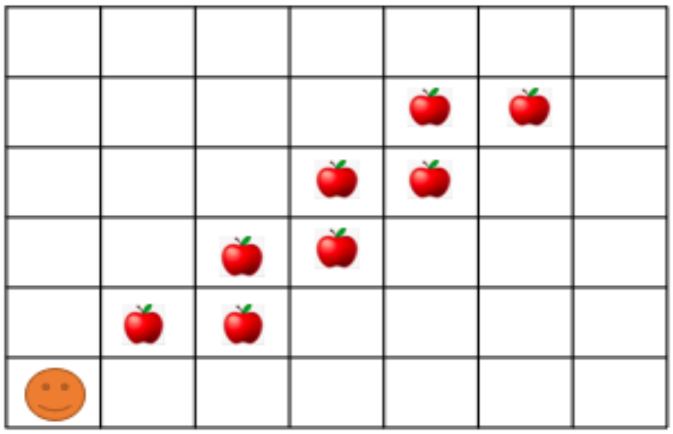


Answer:

REPEAT 4
GO LEFT
REPEAT 4
IF <HAS APPLE>
PICK UP
GO UP
DROP
REPEAT 4
GO DOWN

EXERCICE 7:

Objective	Take all the apple
Maximum number of instructions	8
Allowed instructions	GO-UP GO-DOWN GO-LEFT GO-RIGHT PICK-UP DROP IF REPEAT N-TIME WHILE

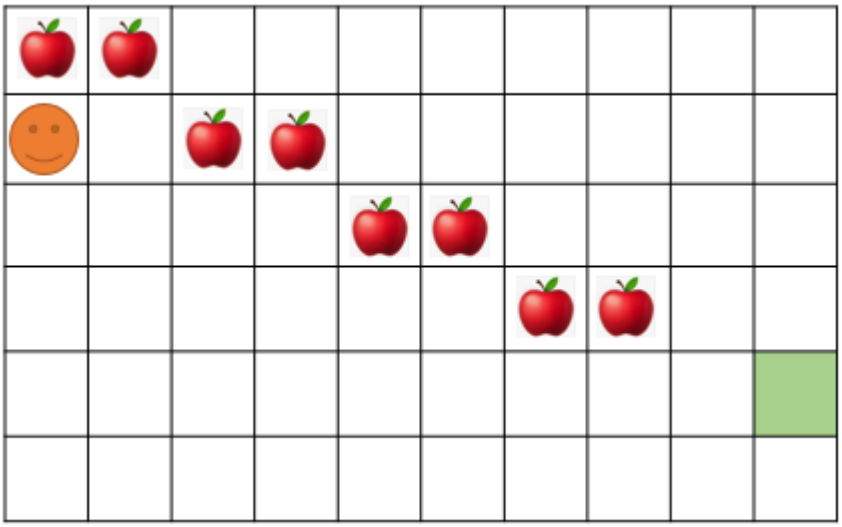


Answer:

REPEAT 5
GO RIGHT
IF <HAS APPLE>
PICK UP
GO UP
IF <HAS APPLE>
PICK UP

EXERCICE 8:

Objective	Take all the apple and go to the green cell
Maximum number of instructions	11
Allowed instructions	GO-UP GO-DOWN GO-RIGHT PICK-UP IF REPEAT N-TIME WHILE



Answer:

GO UP

REPEAT 4

REPEAT 2

PICK UP

GO RIGHT

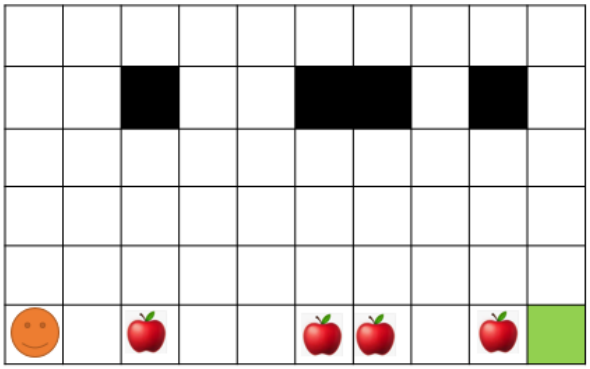
GO DOWN

GO RIGHT

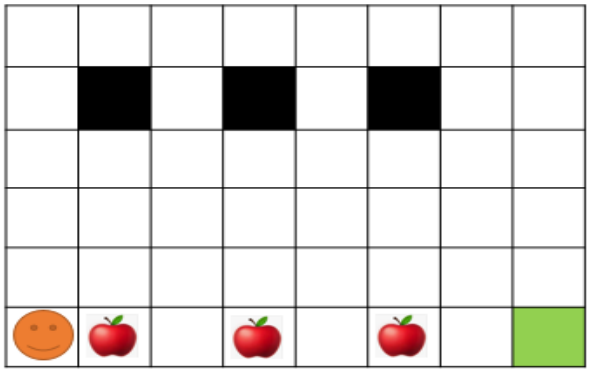
EXERCICE 9:

Objective	Bring all apples put in the black cell and go to the green cell. **Note**: your program must work for the 2 cases!!!
Maximum number of instructions	10
Allowed instructions	GO-UP GO-DOWN DROP GO-RIGHT PICK-UP IF REPEAT N-TIME WHILE
Allowed conditions	 <HAS APPLE> <HAS CELL ON RIGHT> <HAS CELL ON LEFT> <HAS CELL ON UP>

Case 1



Case 2



Answer:

WHILE <HAS CELL ON RIGHT>
GO RIGHT
IF <HAS APPLE>
PICK UP
REPEAT 4
GO UP
DROP
REPEAT 4
GO DOWN