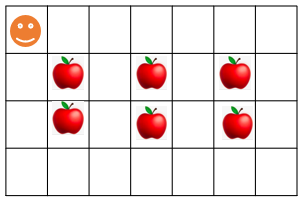
# ACTIVITIES

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:

Repeat<3>

Go right

Repeat<2>

Go down

Has apple

IF

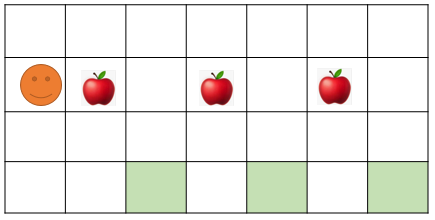
Pick up

Repeat<2>

Go up

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> |



Repeat<3>

Answer:

Go right

Pick up

Go right

Go down

Go down

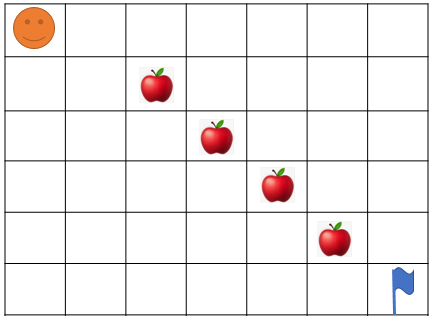
Drop

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> |



Repeat<5>

Answer:

Go right

Has apple

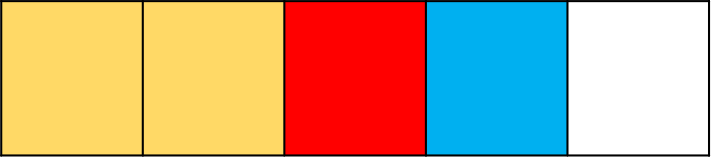
IF

Pick up

Go down

Go right

EXERCICE 4:

What happen at the end?

REPEATE 2 TIMES

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

The robot eat one carrot and go forward.



GO FORWARD

GREEN

GO FORWARD







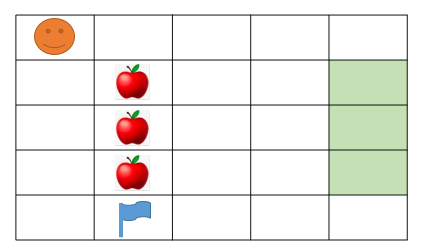




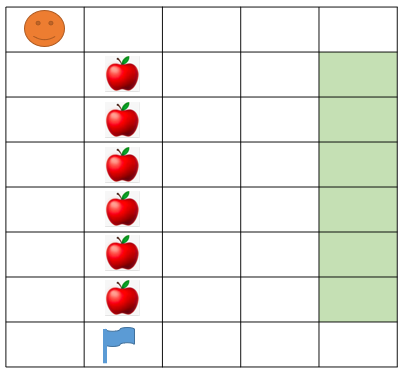


EXERCICE 5:

|  |  |
| --- | --- |
| 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: 



Go Right

Go down

Has apple

while

Pickup

Answer:

Repeat<3>

Go Right

Drop

Repeat<3>

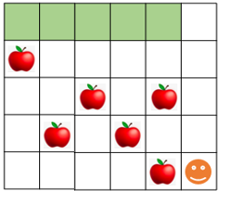
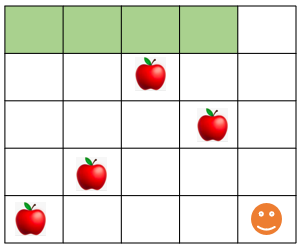
Go Left

Go down

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> |





Has cell on left

while

Answer:

Go left

Repeat<4>

Has apple

IF

Pick up

Go up

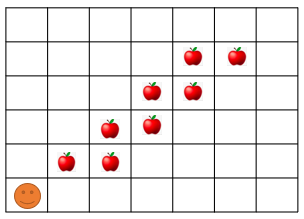
Drop

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 |



Go right

Answer:

Repeat<4>

Go up

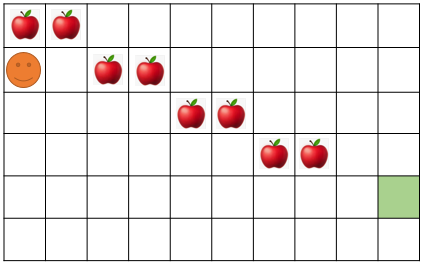
Pick up

Go right

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:

Has apple on up

while

Go up

Pick up

Go right

Pick up

Go down

Go down

Go right

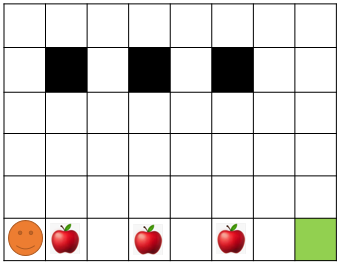
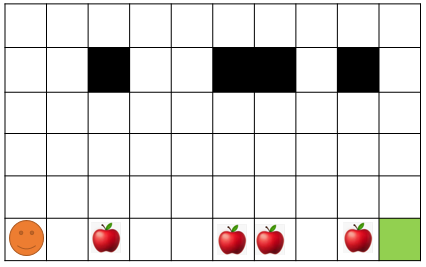
Go up

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> |





Has cell on right

while

Answer:

Go right

Has apple

IF

Go down

Repeat<4>

Drop

Go up

Repeat<4>

Pick up