

Challenge 1- Intermediate

Challenge:

The capybara Capy and his inseparable friend, the Guyrá oxpecker, have a very particular way of traveling through the estuaries. Help Capy pick up his friend to put him on his head and thus embark on a new adventure together.

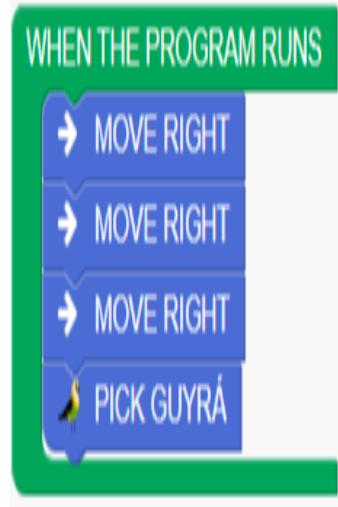
Clue:

Pay attention to the order of the primitives: what you have to do first and what comes next.

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Blocks in sequence



Challenge 2- Intermediate

Challenge:

Now Cappy needs to collect two cans to his right, then two lower ones, and one at the bottom.

Clue:

Did you see the procedures? They can help you **create new commands** to use **as many times as you want.**

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Blocks in sequence

```
WHEN THE PROGRAM RUNS
→ MOVE RIGHT
→ MOVE RIGHT
➡ PICK CAN
↓ MOVE DOWN
➡ PICK CAN
↑ MOVE UP
← MOVE LEFT
← MOVE LEFT
↓ MOVE DOWN
↓ MOVE DOWN
↓ MOVE DOWN
↓ MOVE DOWN
➡ PICK CAN
↑ MOVE UP
→ MOVE RIGHT
→ MOVE RIGHT
➡ PICK CAN
↓ MOVE DOWN
➡ PICK CAN
```

Blocks in repetition

```
WHEN THE PROGRAM RUNS
TOTO
TOTS
↓ MOVE DOWN
↓ MOVE DOWN
↓ MOVE DOWN
TOTO
TOTS
↓ MOVE DOWN
➡ MOVE UP
← MOVE LEFT
← MOVE LEFT
TOTO
TOTS
↓ MOVE DOWN
➡ MOVE UP
→ MOVE RIGHT
→ MOVE RIGHT
➡ PICK CAN
↓ MOVE DOWN
➡ PICK CAN
```

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Challenge 3- Intermediate

Challenge:

Make Chuy take a step forward, warm up (moving back and forth, twice), pick up the rubber ball, do keepie-uppie flipping the ball and bouncing it with the foot and finally come back to the original place.

Clue:

You can create new actions in My procedures by defining new blocks including other actions.

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Blocks in sequence

```
WHEN THE PROGRAM RUNS
→ MOVE FORWARD
← MOVE BACKWARD
→ MOVE FORWARD
← MOVE BACKWARD
→ MOVE FORWARD
PICK THE RUBBER BALL
VOLLEY THE RUBBER BALL
BOUNCE WITH FOOT THE RUBBER BALL
← MOVE BACKWARD
← MOVE BACKWARD
→ MOVE FORWARD
```

Blocks in repetition

```
When the program runs
Define anto + 
  → Move forward
  ← Move backward
ant
ant
  Pick the rubber ball
  Volley the rubber ball
  Bounce with foot the rubber ball
  ← Move backward
```

Challenge 4- Intermediate

Challenge:

Help Chuy bounce the ping pong ball 30 times non-stop. Clue: you can solve this challenge with less than 30 blocks.

Clue:

The Repeat block allows you to select the number of times you want to repeat a sequence of actions. This is called \"Simple repetition\".

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Blocks in sequence

```
WHEN THE PROGRAM RUNS
  ↗ BOUNCE PING PONG BALL
  ↗ BOUNCE PING PONG BALL
```

Blocks in repetition

```
WHEN THE PROGRAM RUNS
  REPEAT [30] TIMES
    BOUNCE PING PONG BALL
```

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Challenge 5- Intermediate

Challenge:

Mañic is obsessed with the sky, and she particularly loves stargazing! Help her do so. Clue: Create a procedure for each block of stars.

Clue:

There are many ways to stargaze. You may start from the right side, or maybe even from the top! Are there any other strategies? Consider the options before programming them.

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Blocks in sequence

```
WHEN THE PROGRAM RUNS
→ MOVE RIGHT
★ WATCH STAR
→ MOVE RIGHT
★ WATCH STAR
→ MOVE RIGHT
→ MOVE RIGHT
→ MOVE RIGHT
↑ MOVE UP
★ WATCH STAR
↑ MOVE UP
★ WATCH STAR
↑ MOVE UP
★ WATCH STAR
← MOVE LEFT
← MOVE LEFT
★ WATCH STAR
← MOVE LEFT
← MOVE LEFT
★ WATCH STAR
```

Blocks in repetition

```
WHEN THE PROGRAM RUNS
REPEAT [2] TIMES
  → MOVE RIGHT
  ★ WATCH STAR
  → MOVE RIGHT
  → MOVE RIGHT
REPEAT [3] TIMES
  ↑ MOVE UP
  ★ WATCH STAR
REPEAT [2] TIMES
  ← MOVE LEFT
  ← MOVE LEFT
  ★ WATCH STAR
```

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Challenge 6- Intermediate

Challenge:

Help Yvoty wake up all the fireflies.
Clue: create a procedure to wake up all the fireflies in a diagonal line.

Clue:

You can create a procedure once, and then use it anytime you want within the same program.

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Blocks in sequence

```
WHEN THE PROGRAM RUNS
↑ MOVE UP
♦ WAKE UP FIREFLY
↑ MOVE UP
→ MOVE RIGHT
♦ WAKE UP FIREFLY
↑ MOVE UP
→ MOVE RIGHT
♦ WAKE UP FIREFLY
↑ MOVE UP
→ MOVE RIGHT
♦ WAKE UP FIREFLY
↑ MOVE UP
→ MOVE RIGHT
♦ WAKE UP FIREFLY
→ MOVE RIGHT
♦ WAKE UP FIREFLY
→ MOVE RIGHT
→ MOVE RIGHT
↓ MOVE DOWN
♦ WAKE UP FIREFLY
← MOVE LEFT
↓ MOVE DOWN
♦ WAKE UP FIREFLY
↓ MOVE DOWN
← MOVE LEFT
♦ WAKE UP FIREFLY
↓ MOVE DOWN
← MOVE LEFT
♦ WAKE UP FIREFLY
```

Blocks in repetition

```
WHEN THE PROGRAM RUNS
REPEAT [4] TIMES
  ↑ MOVE UP
  ♦ WAKE UP FIREFLY
  → MOVE RIGHT
  → MOVE RIGHT
  ↓ MOVE DOWN
  ♦ WAKE UP FIREFLY
REPEAT [3] TIMES
  ← MOVE LEFT
  ↓ MOVE DOWN
  ♦ WAKE UP FIREFLY
```

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Challenge 7-Intermediate

Challenge:

Le pingüine Chuy es fan de todos los deportes y ha logrado una gran cantidad de victorias, tantas son que tiene desparramados sus trofeos por varios lugares. Ayudá a Chuy a recoger todos los trofeos.

Clue:

Pensá en cómo resolverás el problema. Identificá si hay tareas repetitivas. ¿Qué bloques te podrían ayudar a resolver estas tareas?

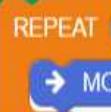
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Blocks in sequence

Blocks in repetition

WHEN THE PROGRAM RUNS



```
when green flag clicked
repeat (4)
  move right
  pick trophy
end
repeat (4)
  move up
  move left
  pick trophy
end
```

Challenge 8-Intermediate

Challenge:

Ayudá a Mañic a reparar todos los telescopios. Pista: podés hacer un procedimiento que tome una fila de telescopios.

Clue:

Usar muchas veces un procedimiento te ahorra trabajo.

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Blocks in sequence

Blocks in repetition

WHEN THE PROGRAM RUNS

REPEAT (3) TIMES

ANTO

GO TO LEFT BORDER

MOVE UP

Challenge 9- Intermediate

Challenge:

Mañic needs to watch all planets in the grid. Think how you could help her do it by creating the necessary blocks.

Clue:

You can also think if there is a strategy that allows you to ****reuse**** the same procedure several times.

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Blocks in sequence

```
WHEN THE PROGRAM RUNS
-> WATCH PLANET
-> MOVE RIGHT
-> WATCH PLANET
-> MOVE RIGHT
-> WATCH PLANET
-> MOVE LEFT
-> WATCH PLANET
-> MOVE RIGHT
-> WATCH PLANET
-> MOVE RIGHT
-> WATCH PLANET
-> MOVE UP
-> MOVE UP
-> WATCH PLANET
-> MOVE LEFT
-> WATCH PLANET
-> MOVE UP
-> WATCH PLANET
-> MOVE LEFT
-> WATCH PLANET
-> MOVE LEFT
-> WATCH PLANET
-> MOVE LEFT
-> WATCH PLANET
-> MOVE UP
-> WATCH PLANET
-> MOVE UP
-> WATCH PLANET
-> MOVE RIGHT
-> WATCH PLANET
-> MOVE RIGHT
-> WATCH PLANET
-> MOVE RIGHT
-> WATCH PLANET
```

Blocks in repetition

```
Define toto + 
Repeat (5) times
  Move left
  Move up
  Watch planet
  Move up
Define toto2 + 
Repeat (5) times
  Move right
  Watch planet
  toto2
  toto
  Watch planet
  toto2
```

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Challenge 10- Intermediate

Challenge:

Yvoty needs to charge the 7 cell phones on screen with the charger. First pick up the charger, and then go to each cell phone to charge them. Clue: How many steps should your strategy have?

Clue:

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Blocks in sequence

```
WHEN THE PROGRAM RUNS
↑ MOVE UP
↑ MOVE UP
→ MOVE RIGHT
→ MOVE RIGHT
→ MOVE RIGHT
→ MOVE RIGHT
→ PICK CHARGER
↑ MOVE UP
← MOVE LEFT
↗ CHARGE CELL PHONE
↓ MOVE DOWN
↓ MOVE DOWN
↓ MOVE DOWN
→ MOVE RIGHT
↗ CHARGE CELL PHONE
→ MOVE RIGHT
↗ CHARGE CELL PHONE
→ MOVE RIGHT
↗ CHARGE CELL PHONE
```

Blocks in repetition

```
When the program runs
↑ Move up
↑ Move up
Repeat (4) [Move right
  Pick charger
  ↑ Move up]
Repeat (4) [← Move left
  ↗ Charge cell phone]
Repeat (3) [↓ Move down]
Repeat (3) [→ Move right
  ↗ Charge cell phone]
```

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Challenge 11- Intermediate

Challenge:

Yvoty needs to install a game in 3 different computers to have fun with his friends. The steps to install the game in each computer are: powering the computer on, writing the password ("ABC"), installing the game, and finally powering the computer off. Clue: make the most of the fact that you have to do the same work in each computer.

Clue:

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Blocks in sequence

```
WHEN THE PROGRAM RUNS
→ GO TO NEXT COMPUTER
⟳ TURN THE COMPUTER ON
A WRITE "A"
B WRITE "B"
C WRITE "C"
💾 INSTALL THE GAME
⟳ TURN THE COMPUTER OFF
→ GO TO NEXT COMPUTER
⟳ TURN THE COMPUTER ON
A WRITE "A"
B WRITE "B"
C WRITE "C"
💾 INSTALL THE GAME
⟳ TURN THE COMPUTER OFF
→ GO TO NEXT COMPUTER
⟳ TURN THE COMPUTER ON
A WRITE "A"
B WRITE "B"
C WRITE "C"
💾 INSTALL THE GAME
⟳ TURN THE COMPUTER OFF
```

Blocks in repetition

```
When the program runs
Repeat [3] times
→ Go to next computer
⟳ Turn the computer on
A Write "A"
B Write "B"
C Write "C"
💾 Install the game
⟳ Turn the computer off
```

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Challenge 12- Intermediate

Challenge:

Help Cappy:
1) Search for the telescope
2) Give the telescope to Mañic
3) Bring the ball to Chuy
4) Bring the charger to Yvoty
5) Leave on the alligator.

Clue:

No pienses el desafío como un todo. Acordate de separar el problema grande en pequeños problemas e ir resolviendo cada uno tranquilamente.

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Blocks in sequence

```
WHEN THE PROGRAM RUNS
→ MOVE RIGHT
→ MOVE RIGHT
→ MOVE RIGHT
→ MOVE RIGHT
↑ MOVE UP
↑ MOVE UP
 TAKE TELESCOPE
↑ MOVE UP
← MOVE LEFT
← MOVE LEFT
← MOVE LEFT
← MOVE LEFT
 GIVE TELESCOPE AND TAKE BALL
↓ MOVE DOWN
↓ MOVE DOWN
→ MOVE RIGHT
→ MOVE RIGHT
 GIVE BALL AND TAKE CHARGER
↑ MOVE UP
 GIVE CHARGER AND INVITE YVOTY
↓ MOVE DOWN
↓ MOVE DOWN
← MOVE LEFT
 GO IN ALLIGATOR
```

Blocks in repetition

```
Define [Do something] + [ ]
Repeat [ ] times
  Move right
  Move up
  Take telescope
  Move up
  Move left
  Give telescope and take ball
Define [Do something2] + [ ]
When the program runs
  Do something
  Do something2
  Move up
  Give charger and invite Yvoty
  Move down
  Move down
  Move left
  Go in alligator
  Define [Do something2] + [ ]
  Move down
  Move down
  Move right
  Move right
  Give ball and take charger
```

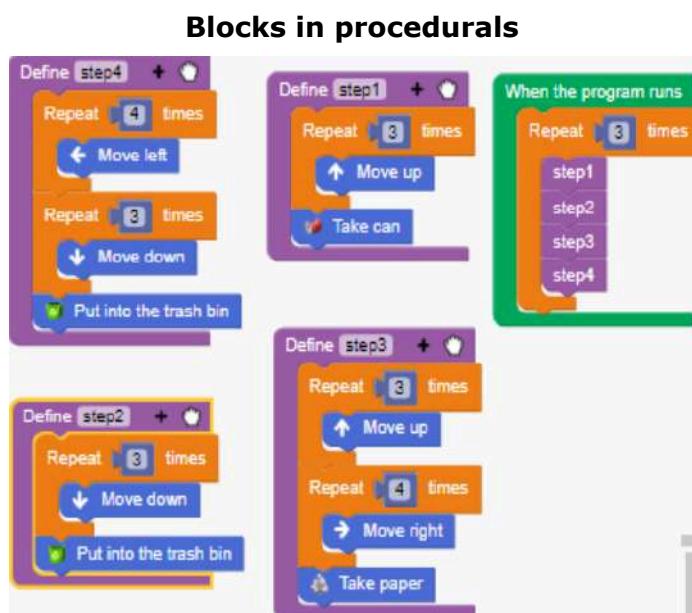
Challenge 13- Intermediate

Instructions: or Challenge or Description:

Capy needs to clean the wetland to go surfing. To achieve this, Capy needs to carry 3 cans and 3 papers to the trash, but Capy cannot throw more than one at a time. Then, Capy gets on the alligator and finally goes surfing!

Tip or Clue:

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Challenge 14- Intermediate

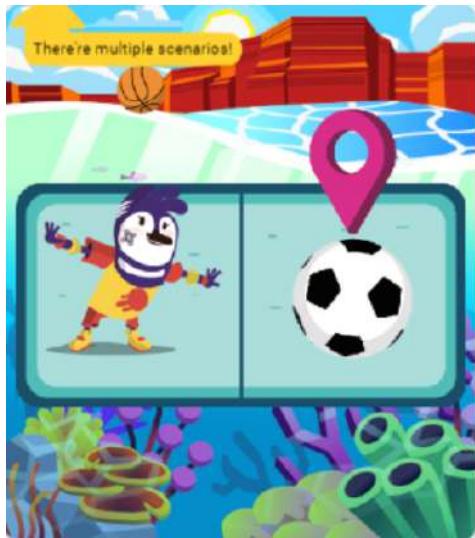
Challenge:

Chuy quedó emocionada con el campeonato de fútbol femenino y quiere imitar a sus heroínas practicando tiros libres con su pelota. Para eso, debe correr hacia ella y patearla **sí lo hay una pelota**. Si no, no hace nada. Ayúdala a Chuy a hacer sus tiros libres, pateando todas las pelotas.

Clue:

Antes que nada, aprieta varias veces el botón **Ejecutar** y fíjate cómo cambia el escenario. Para patear, Chuy y la pelota deben estar en la misma casilla.

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Blocks in sequence



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Challenge 15- Intermediate

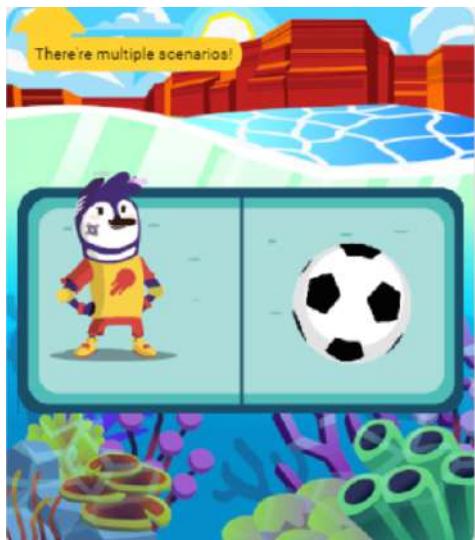
Challenge:

Sabemos que a Chuy le gustan todos los deportes, nunca son demasiados y se dispone a jugar varios a la vez :smile:. Segí^un aparezca una pelota de fútbol o una de ping-pong, Chuy deberá^á patearla o rebotarla en la paleta. Ayúdá a Chuy a practicar estos deportes.

Clue:

Cuando si^élo hay 2 opciones (en este caso puede haber una pelota de fútbol o una pelota de ping pong), alcanza con hacer una sola pregunta. Para estas situaciones se puede usar el bloque 'Si^é si no'.

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Blocks in sequence



Challenge 16- Intermediate

Instructions: or Challenge or Description:

In Mañic's paths there are usually a lot of obstacles. Some of them get in the way to watch her favorite star. If that happens, Mañic must take the long, winding and sinuous road. Help Mañic watch the star at the end of the path. Don't forget to download your solution! (you'll need it later).

Tip or Clue:

How many roads to the stars are there? Can all of them always be traversed or does it depend on something?

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Blocks in procedurals



Challenge 17- Intermediate

Instructions: or Challenge or Description:

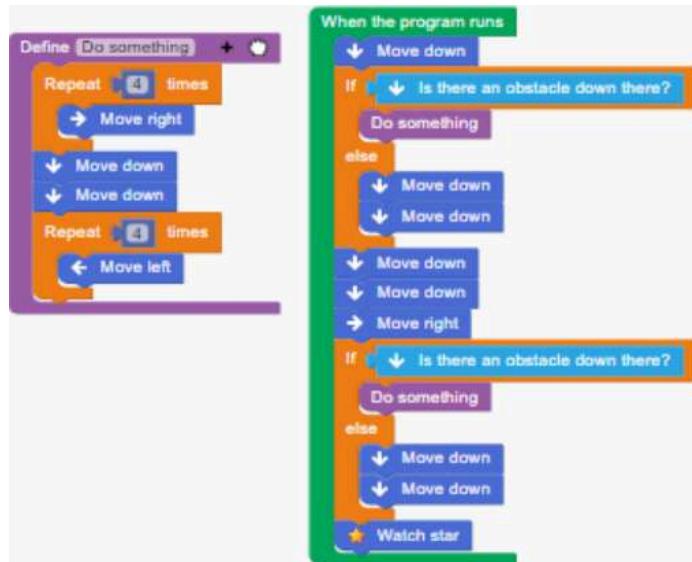
Mañic heard about the location of another beautiful star in the sky, though the road it's longer and more dangerous. The road is not always free of obstacles.

Tip or Clue:

Is there a pattern that repeats? Could the solution of the previous challenge (Mañic's stars) help us?

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Blocks in procedurals



Challenge 18- Intermediate

Instructions: or Challenge or Description:

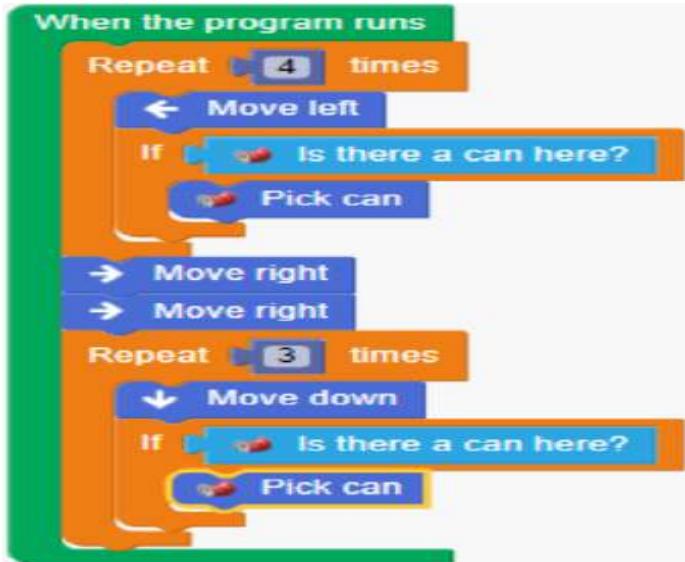
\"Nothing better than getting up in the morning and going out to keep the world clean\" Cappy thinks. Help Cappy to collect all the cans he finds in his path. Don't forget to download your solution (you'll need it later).

Tip or Clue:

How can Cappy easily tell if there is a row of cans? What should he do if there is no can?

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Blocks in procedurals



Challenge 19- Intermediate

Instructions: or Challenge or Description:

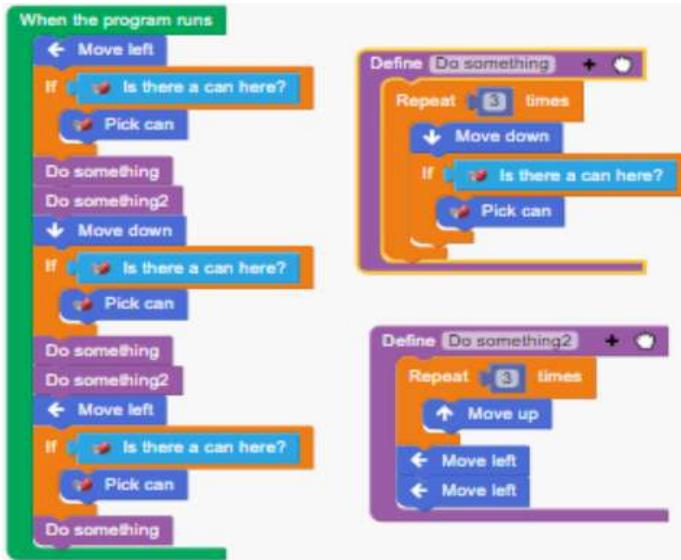
Today is a special day to help keep the planet clean... but there are people who throw cans on the floor. Help Capy to collect the cans from all the rows he finds in his path.

Tip or Clue:

Is there a task that Capy has to perform multiple times? Could the solution to the previous challenge (Row of Cans) help us?

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Blocks in procedurals



Challenge 20- Intermediate

Challenge:

Chuy no se quiere perder ninguna jugada! Esta vez esté practicando sus movimientos rápidos hacia abajo y hacia la derecha, segíñen se presente la posibilidad. Ayudale a practicar!

Clue:

Hay que encontrar una manera de que Chuy pueda ****sensar**** si debe moverse hacia la derecha o hacia abajo ya que el escenario no siempre es el mismo.

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Blocks in sequence



Challenge 21- Intermediate

Instructions: or Challenge or Description:

Cuando Chuy lleva la pelota, no hay obstáculo que pueda detenerle. Ayudale a encontrar el recorrido para llegar a la esquina inferior derecha de la cancha, esquivando los obstáculos que se le presenten.

Tip or Clue:

Los diferentes caminos posibles... ¿tienen el mismo o distinto largo? Recordá que en cada ejecución te encontrarás con un escenario distinto.

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Blocks in procedurals

When the program runs

```
Repeat (14) times
  If Can I move down?
    Move down
  else
    Move right
```

Challenge 22- Intermediate

Instructions: or Challenge or Description:

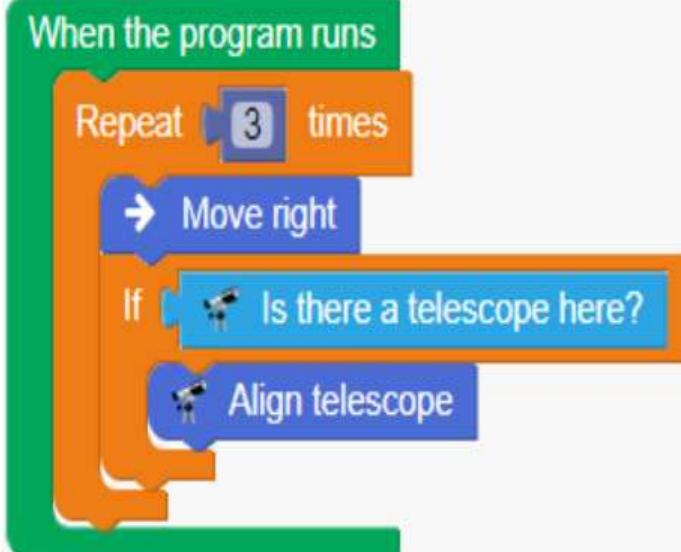
Mañic should repair all telescopes. But they neither appear always in the same places, nor the same number of telescopes! Clue: first think what procedure you should create to repair only one telescope, if it appears.

Tip or Clue:

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Blocks in procedurals



Challenge 23- Intermediate

Instructions: or Challenge or Description:

Yvoty needs to wake up all the fireflies to know the route... But they change their places each time you run the program! You can use the procedures and control blocks.

Tip or Clue:

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Blocks in procedurals



Challenge 24- Intermediate

Instructions: or Challenge or Description:

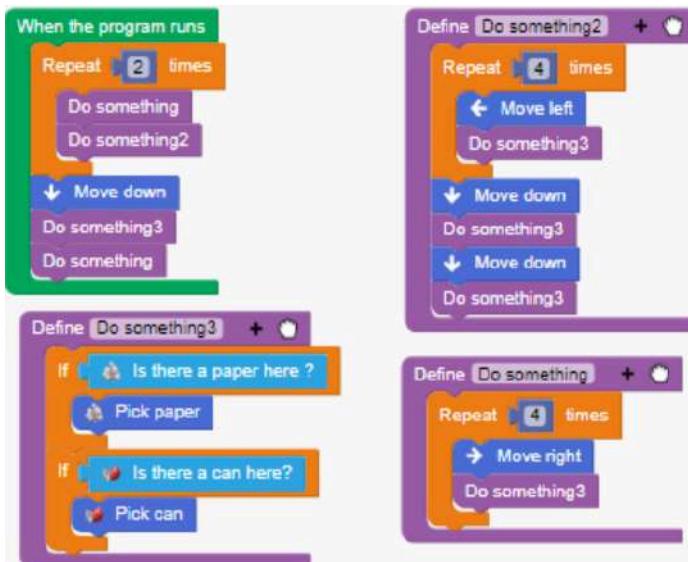
Life on the planet can be very difficult for Capy, so running into an area full of garbage is a problem. Help Capy to collect all the cans and papers that he finds in his path.

Tip or Clue:

Think of a strategy that allows Capy to go down a row and collect all the cans and papers he finds. Can the same be done in the other rows?

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Blocks in procedurals



Challenge 25- Intermediate

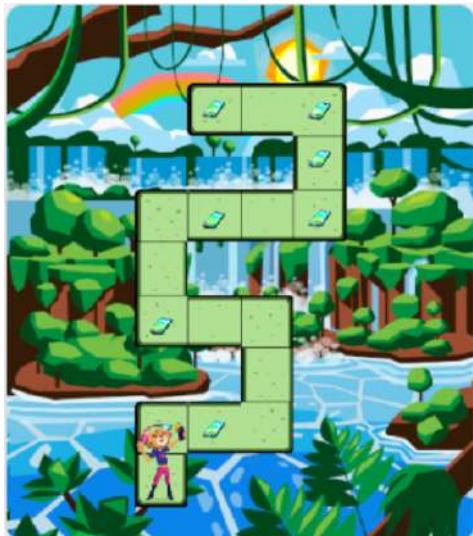
Instructions: or Challenge or Description:

Yvoty found an aisle full of cell phones! The only problem is that the aisle turns several times and the cell phones are right there... Will Yvoty be able to unlock all the cell phones in this aisle?

Tip or Clue:

The cell phones are found right in the curves of the aisle. A strategy to unlock the cell phones in a curve would be an excellent help.

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Blocks in procedurals



Challenge 26- Intermediate

Instructions: or Challenge or Description:

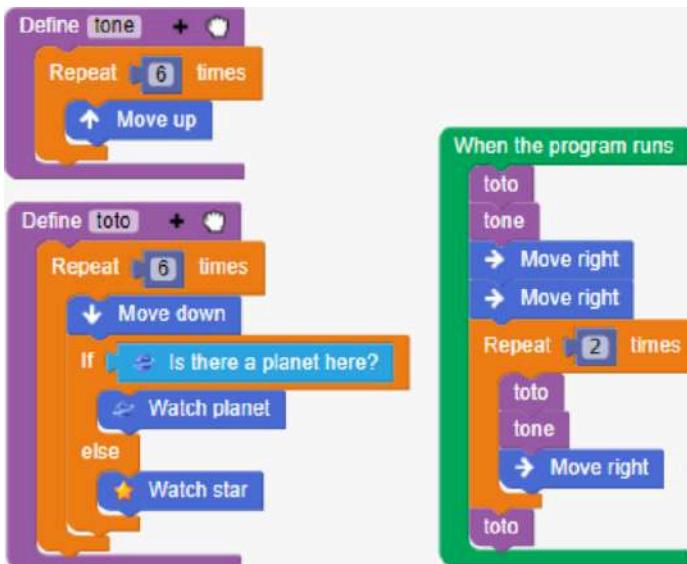
Mañic came to watch the planets and stars at the usual place, although he heard rumors that a great astronomical event is taking place on the sky... Today is a great day to feast!

Tip or Clue:

A normal observation is a column of 6 celestial bodies. How many columns does an astronomical event have? If you can get Mañic to watch the celestial bodies in a column, maybe you can do the same at a feast.

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Blocks in procedurals



Challenge 27- Intermediate

Instructions: or Challenge or Description:

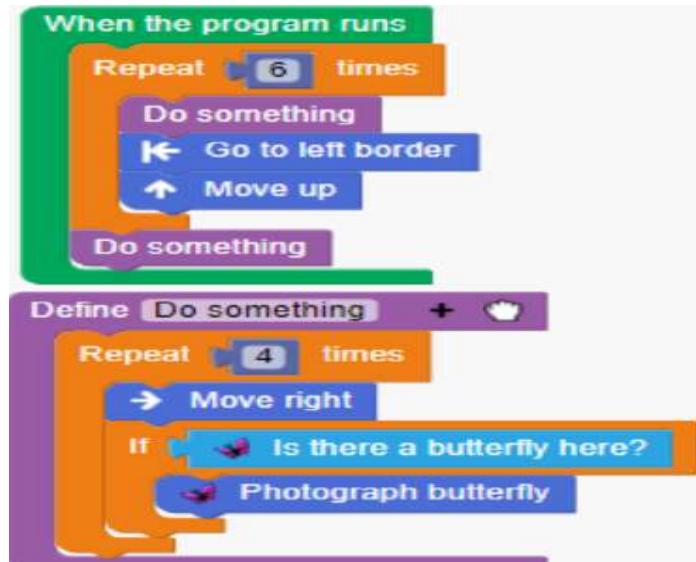
The universe has millions and millions of galaxies; luckily for the star collector, today he must collect only two very small galaxies.

Tip or Clue:

Each galaxy is a group of stars distributed differently but always in the same space. Think of a strategy that goes from the simplest to the most complex: first a box, then a row or column, and finally a galaxy.

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Blocks in procedurals



Challenge 28- Intermediate

Instructions: or Challenge or Description:

Help Yvoty wake up all the fireflies.\nWatch out! There's a firefly in every cell, but you don't know how many cells are there each time you run the program.

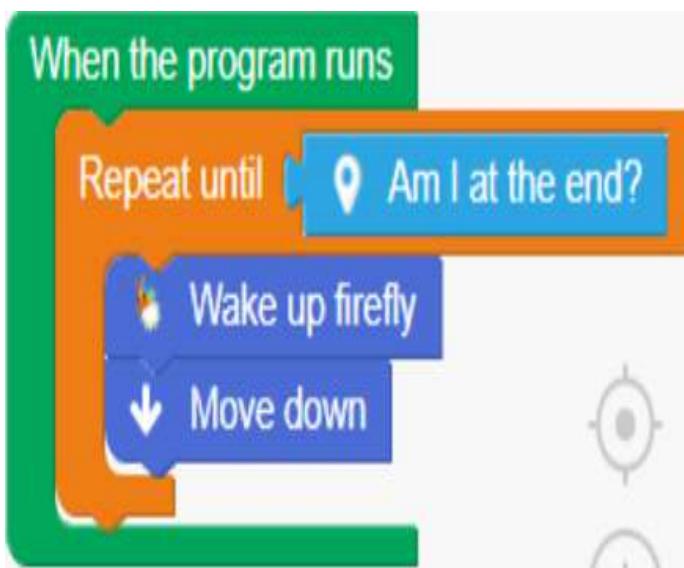
Tip or Clue:

There are new blocks that can help you solve this challenge very easily. Use them!

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Blocks in procedurals



Challenge 29- Intermediate

Instructions: or Challenge or Description:

In this case, Yvoty must also wake up all the lights she finds to illuminate the landscape well, but right now she doesn't know the length of the path... but she also doesn't know if there will be lights at every step! Will the same help you said in "Changing lengths" help you?

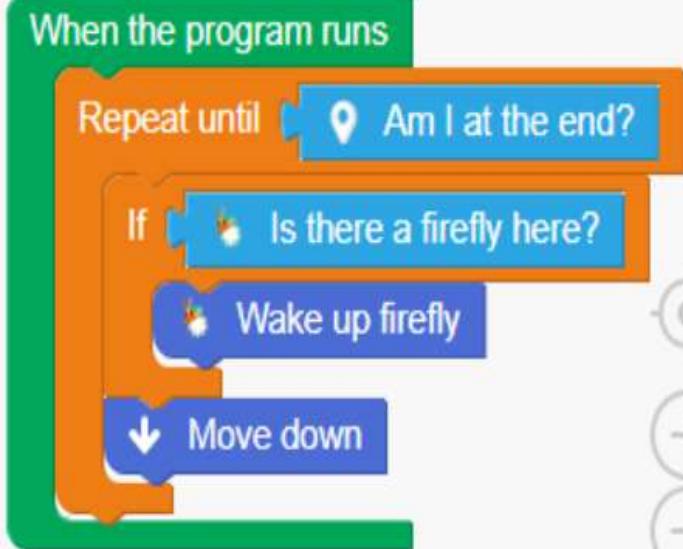
Tip or Clue:

The "Repeat until" block will repeat a sequence of actions until one condition is met. This is called "Conditional repetition".

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Blocks in procedurals



Challenge 30- Intermediate

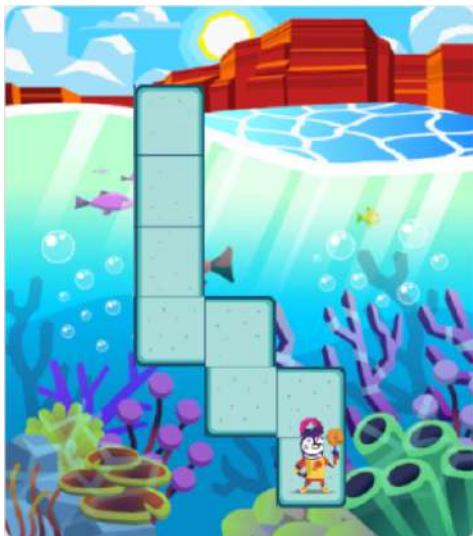
Instructions: or Challenge or Description:

Chuy preparó diferentes recorridos, en diferentes terrenos, para practicar rebotar la pelota de goma. El terreno puede ser más chico o más grande y la pelota puede que esté o no... ¡Ayudale a rebotar todas las pelotas de goma!

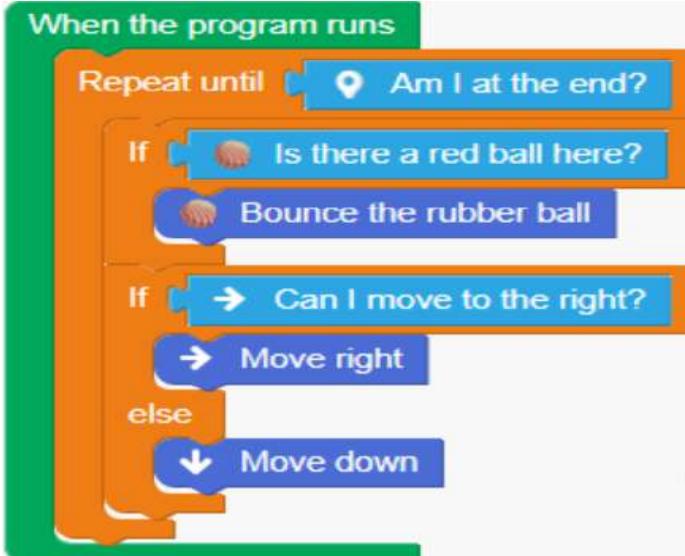
Tip or Clue:

Es fundamental saber, antes de moverse, dónde está la próxima casilla libre y si hay una pelota en la misma. ¿Qué herramientas te sirven para esas comprobaciones?

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Blocks in procedurals



Challenge 31- Intermediate

Instructions: or Challenge or Description:

Help Capy to find Guyrá

Tip or Clue:

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Blocks in procedurals

When the program runs

```
Get back to the left border
Repeat (4) times
  If Is Guyrá here?
    Pick Guyrá
  Move right
```

Challenge 32- Intermediate

Instructions: or Challenge or Description:

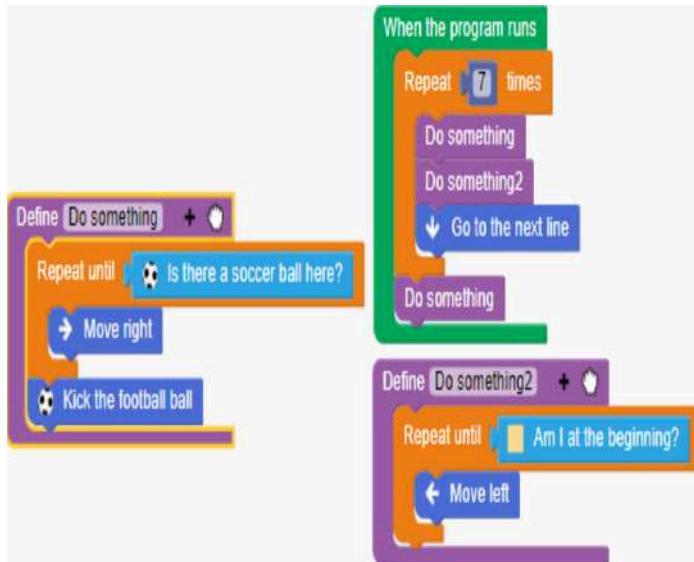
¿Es el fútbol el deporte favorito de Chuy? No lo sabemos ciertamente, pero lo que sí es seguro es que no se pierde un solo partido. En esta oportunidad, ayudá a Chuy a patear todas las pelotas.

Tip or Clue:

La cantidad de filas es constante, pero la longitud de cada una es variable. Fijate cómo manejar estos dos datos para recorrer las mismas y llegar a cada una de las pelotas de fútbol. Una buena idea es hacer un procedimiento que resuelva una fila. ¿no te parece?

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Blocks in procedurals



Challenge 33- Intermediate

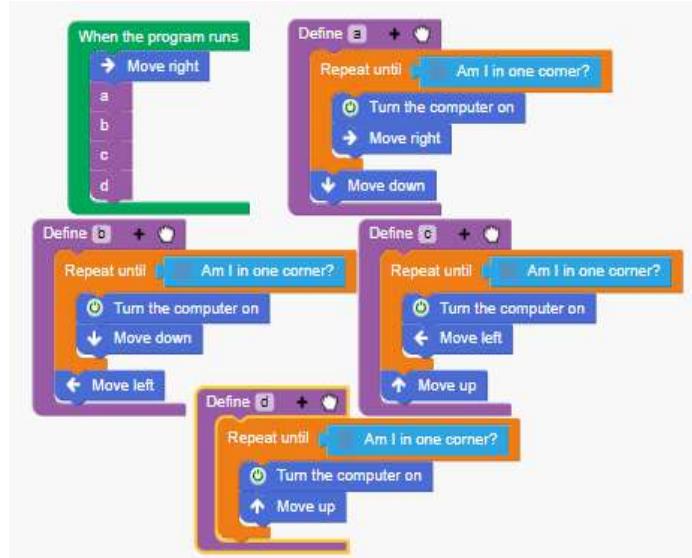
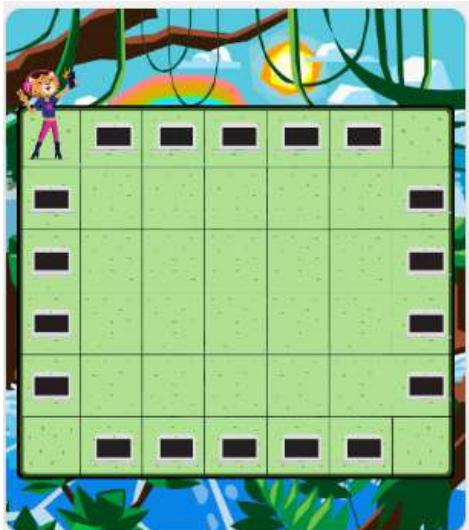
Instructions: or Challenge or Description:

We should power all computers on taking into account that the scenario width and height change each time you run the program. Clue: think how you could turn on all computers from only one rectangle, and then repeat the same action for the rest of the sides.

Tip or Clue:

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Challenge 34- Intermediate

Instructions: or Challenge or Description:

Mañic should visit all boxes and count how many planets and stars are there in total. Clue: first think how you could count whether there is any planet or star in a particular box. Then think how you could count all celestial bodies in only one particular column.

Tip or Clue:

Splitting a big problem into several little problems can help you better understand each of its parts. Even better: you can focus on solving smaller and easier parts!

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