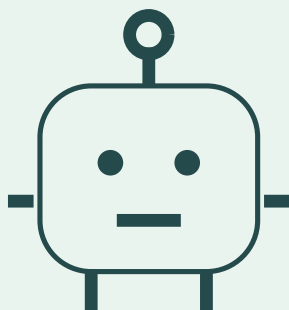


40 ACTIVITIES | A4 PDF

Unplugged Coding

Follow the Robot



Ages 5-8, with a grown-up

Worked example, guidance and grown-up answer notes

Free, without an account. One little step at a time.

For grown-ups

Goal

Follow directions, plan a sequence and test or repair a route.

How to use

Start with one page that suits your child. Read instructions aloud if needed, model one example, then give your child a turn. Listen to their ideas.

Starting point

Ages 5-8, with a grown-up. Age is a guide, not a deadline. There is no need to finish quickly or make perfect marks.

Stages

01-10 explore; 11-20 try with help; 21-30 try independently; 31-40 challenge. Return to easier practice whenever helpful.

Materials

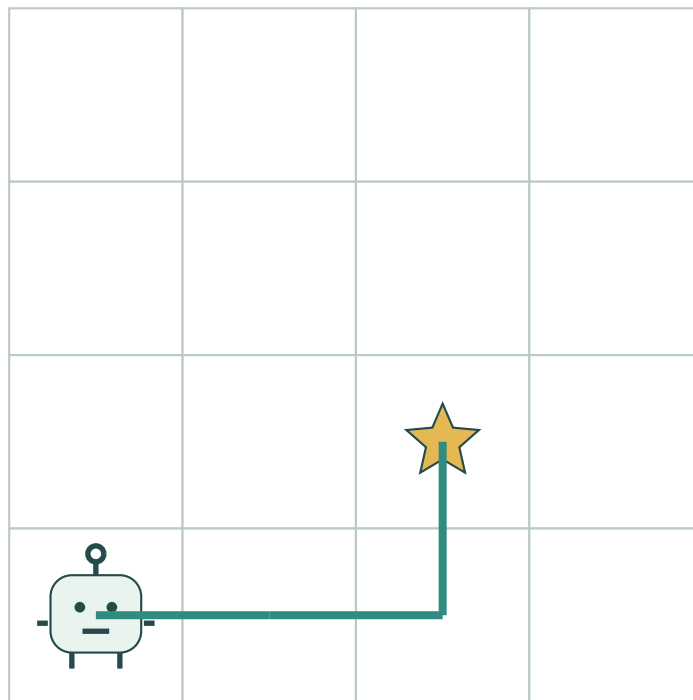
A pencil, eraser and crayons. Scissor activities also need child-safe scissors, easy-to-cut paper and direct adult supervision.

Encouragement

Celebrate effort and allow another try. Stop if your child feels tired or uncomfortable.

Try an example together

One arrow moves one square. Directions follow the page; the robot does not turn.



Read: right, right, up. Test with a finger. On waypoint missions, visit 1 before 2.
Do not pass through rocks.

Your 40-activity map

01-05 **Explore directions**

06-10 **Run the code**

11-15 **Choose the code**

16-20 **Complete the code**

21-25 **Fix a command**

26-30 **Visit a waypoint**

31-35 **Repeat a pattern**

36-40 **Design a route**

Keep any notes privately. No child name, account or profile is needed.

Print and use comfortably

Print

Use A4 portrait, actual size / 100%, preferably single-sided. Print one sample page first. The frame has margins of more than 9 mm.

Black and white

Colour is only an accent. Text, shapes, numbers and path markers still work in black and white.

Scissor safety

Dashed lines are the child's cutting path. A grown-up prepares the outside strips. Use child-safe scissors and direct supervision.

Use and ownership

Free for personal, family and classroom use. You may print for your own pupils. Do not resell or re-upload the PDFs as your own collection. Share the PlayNana page link.

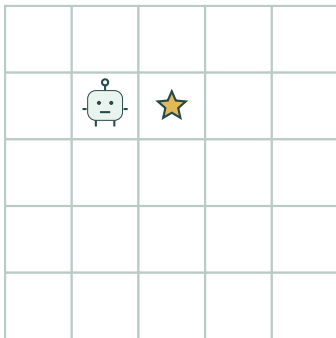
Checks and limits

PDF pages and answers are checked digitally. Physical printing and use with children have not been tested. Adjust the help you offer and stop if uncomfortable.

EXPLORE

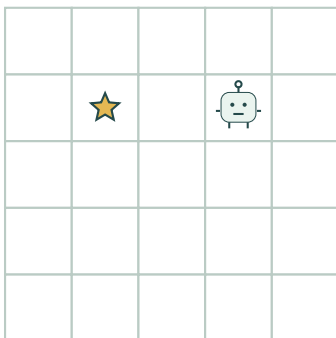
Explore directions

Circle the direction from the robot to the goal. One arrow moves one square.



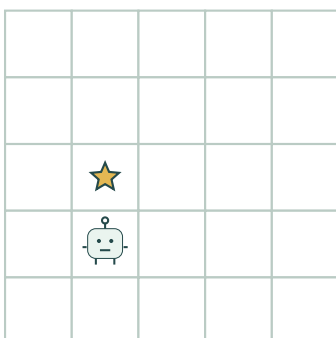
Mission 1

Move 1 squares.



Mission 2

Move 2 squares.



Mission 3

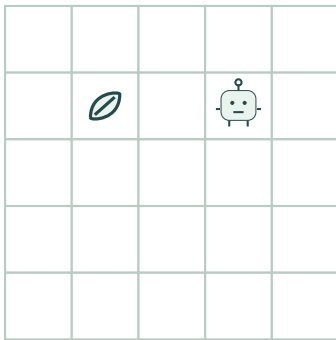
Move 1 squares.



EXPLORE

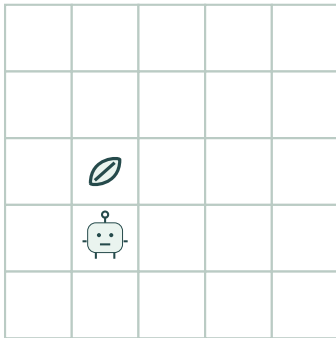
Explore directions

Circle the direction from the robot to the goal. One arrow moves one square.



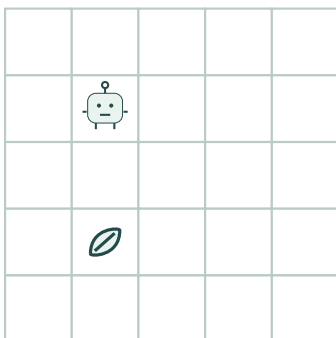
Mission 1

Move 2 squares.



Mission 2

Move 1 squares.



Mission 3

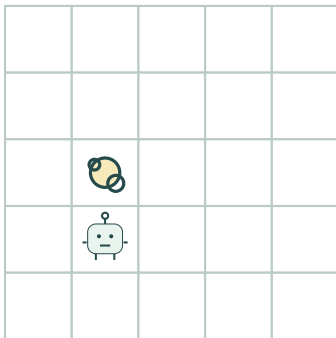
Move 2 squares.



EXPLORE

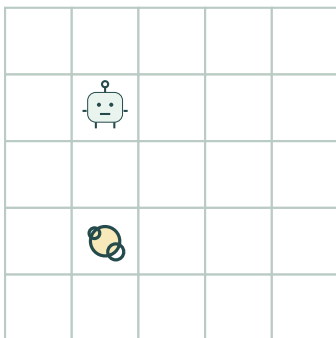
Explore directions

Circle the direction from the robot to the goal. One arrow moves one square.



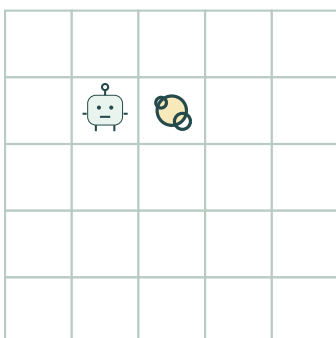
Mission 1

Move 1 squares.



Mission 2

Move 2 squares.



Mission 3

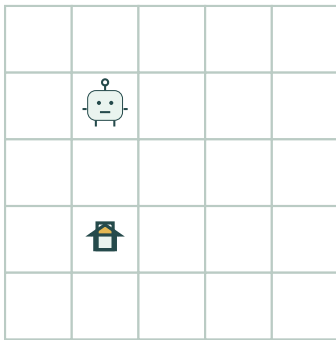
Move 1 squares.



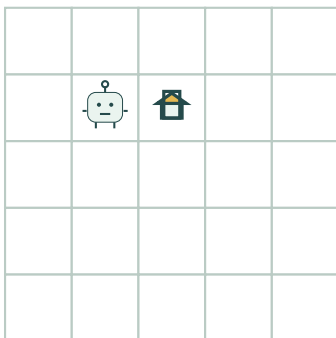
EXPLORE

Explore directions

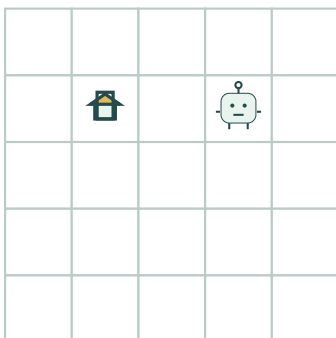
Circle the direction from the robot to the goal. One arrow moves one square.

**Mission 1**

Move 2 squares.

**Mission 2**

Move 1 squares.

**Mission 3**

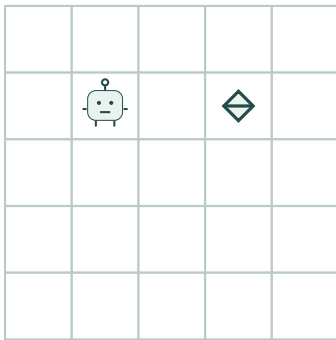
Move 2 squares.



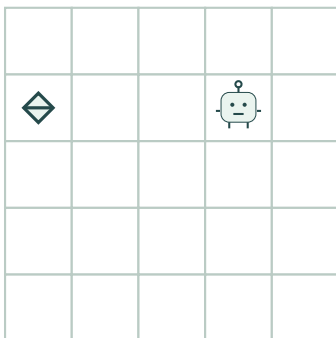
EXPLORE

Explore directions

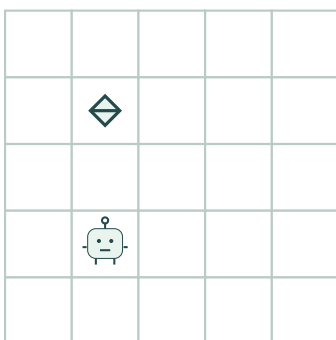
Circle the direction from the robot to the goal. One arrow moves one square.

**Mission 1**

Move 2 squares.

**Mission 2**

Move 3 squares.

**Mission 3**

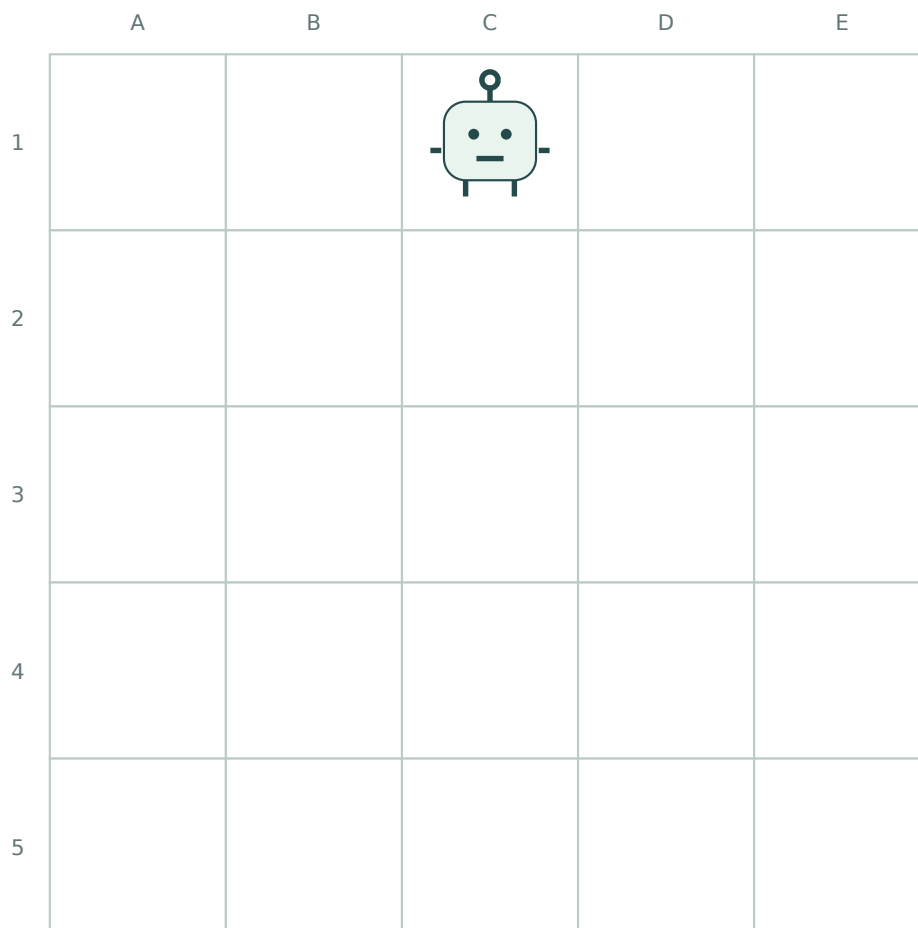
Move 2 squares.



EXPLORE

Run the code

Follow the code from the robot. Draw the route and mark the final square with a star.



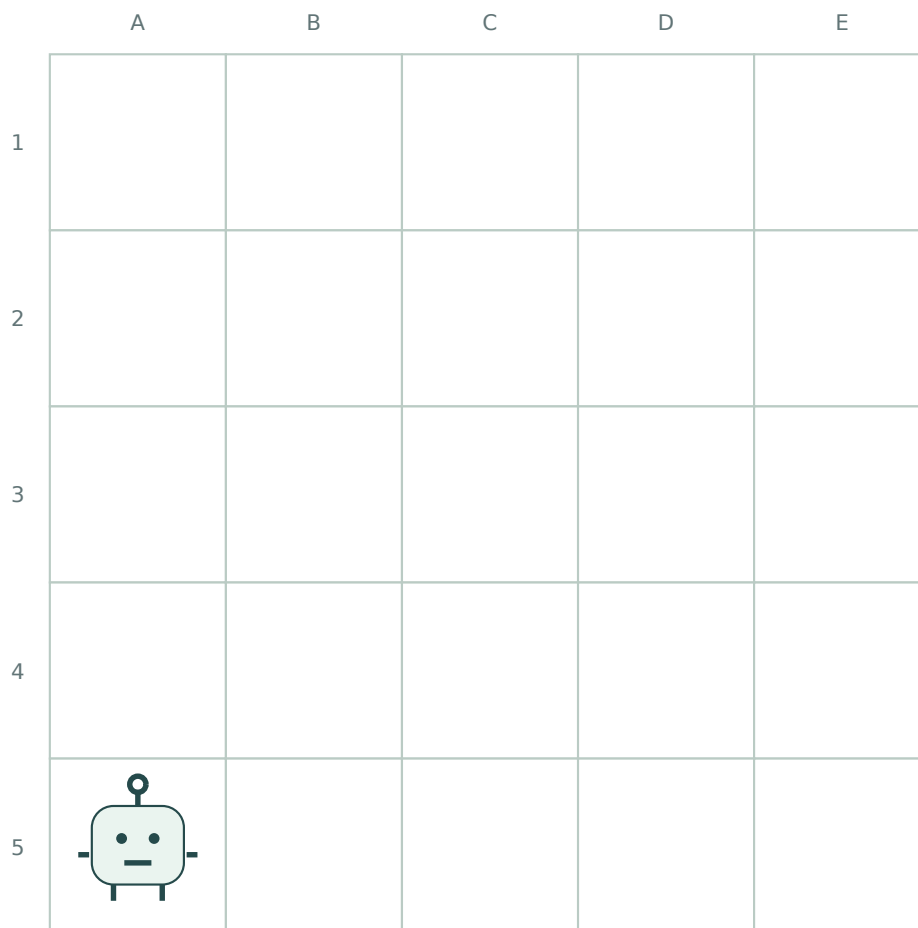
The robot stops at:

Say each direction as your finger moves. Do not skip squares.

EXPLORE

Run the code

Follow the code from the robot. Draw the route and mark the final square with a star.



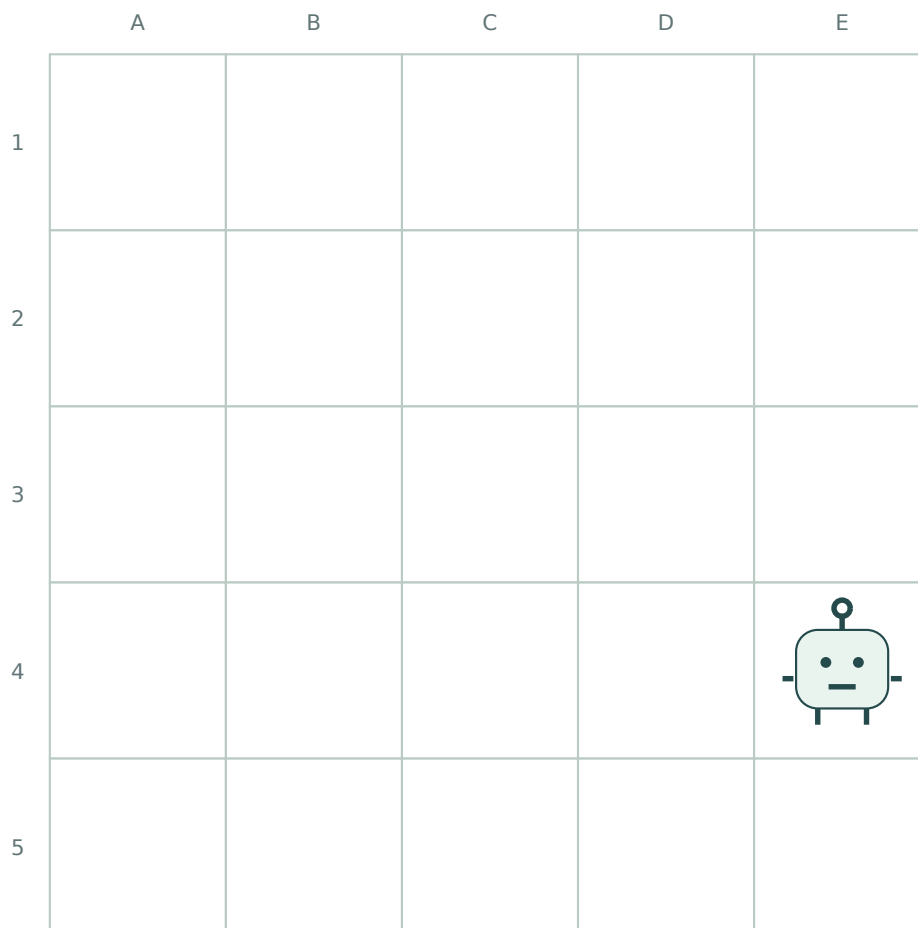
The robot stops at:

Say each direction as your finger moves. Do not skip squares.

EXPLORE

Run the code

Follow the code from the robot. Draw the route and mark the final square with a star.



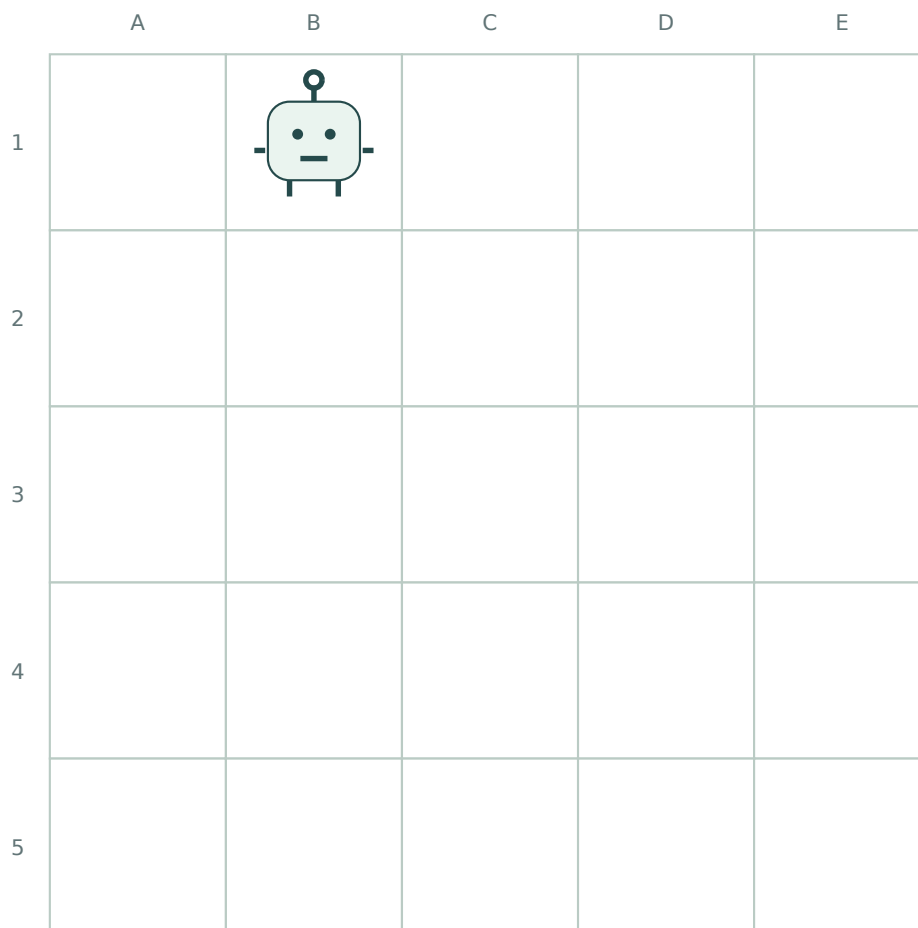
The robot stops at:

Say each direction as your finger moves. Do not skip squares.

EXPLORE

Run the code

Follow the code from the robot. Draw the route and mark the final square with a star.



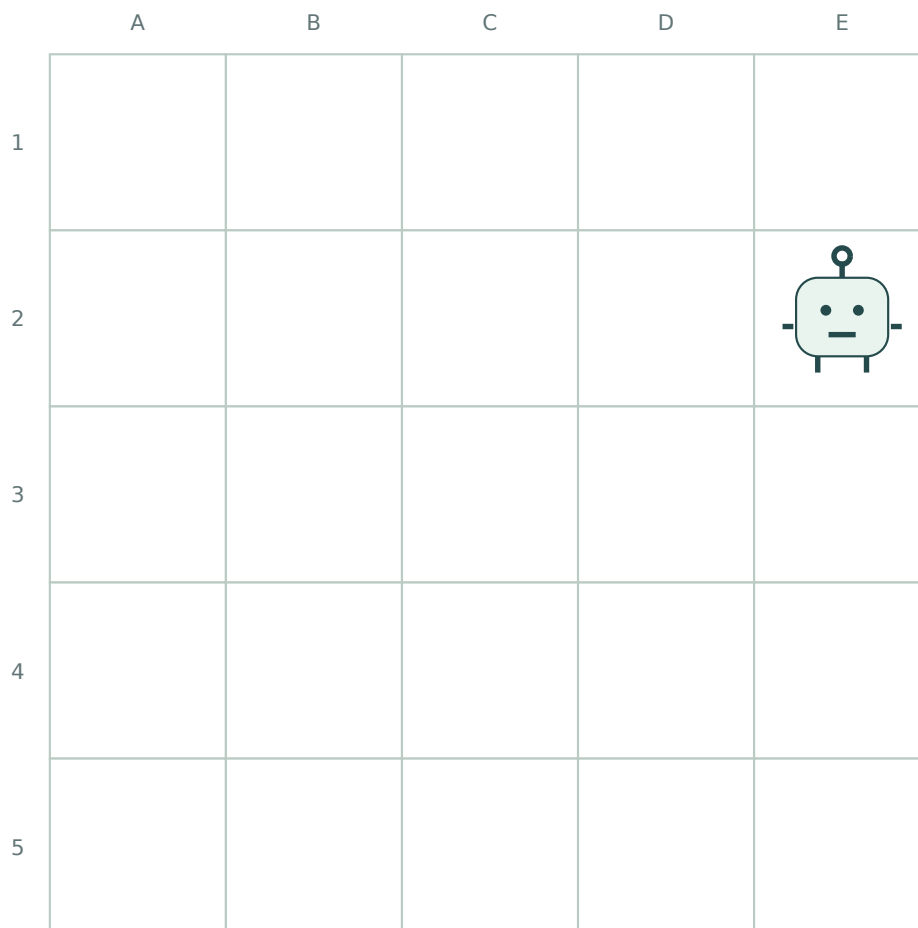
The robot stops at:

Say each direction as your finger moves. Do not skip squares.

EXPLORE

Run the code

Follow the code from the robot. Draw the route and mark the final square with a star.



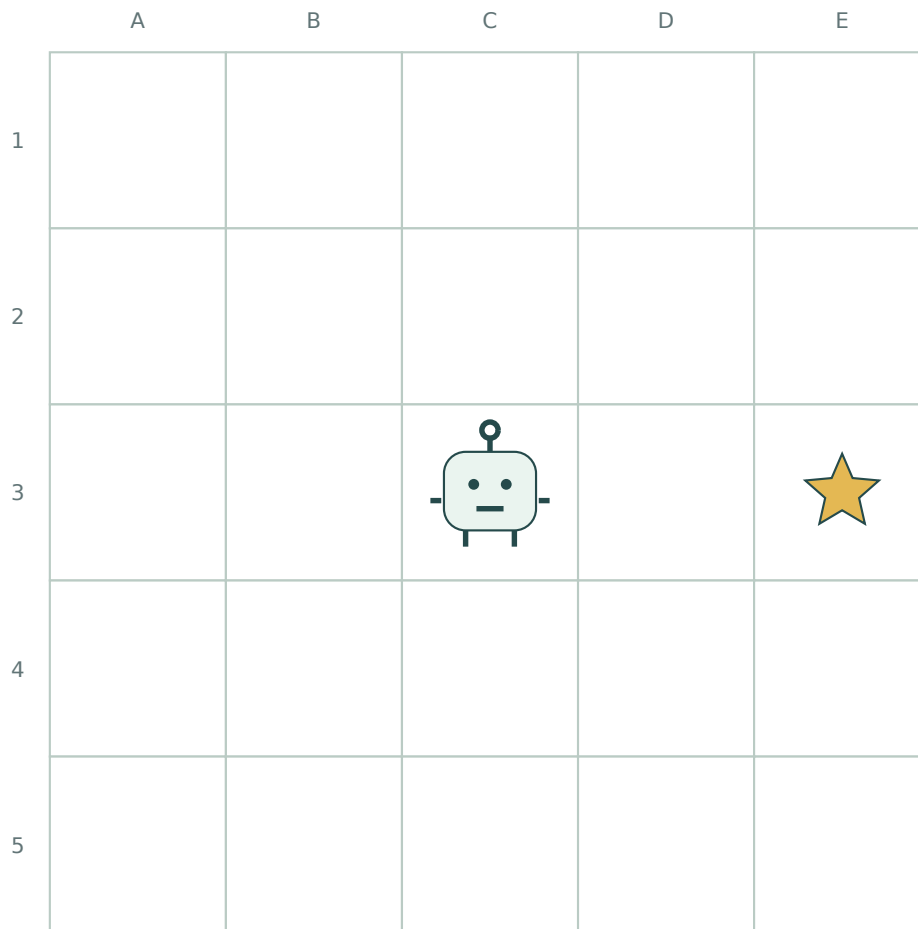
The robot stops at:

Say each direction as your finger moves. Do not skip squares.

TRY WITH HELP

Choose the code

Which code takes the robot to the goal? Circle A, B or C.



A    

B    

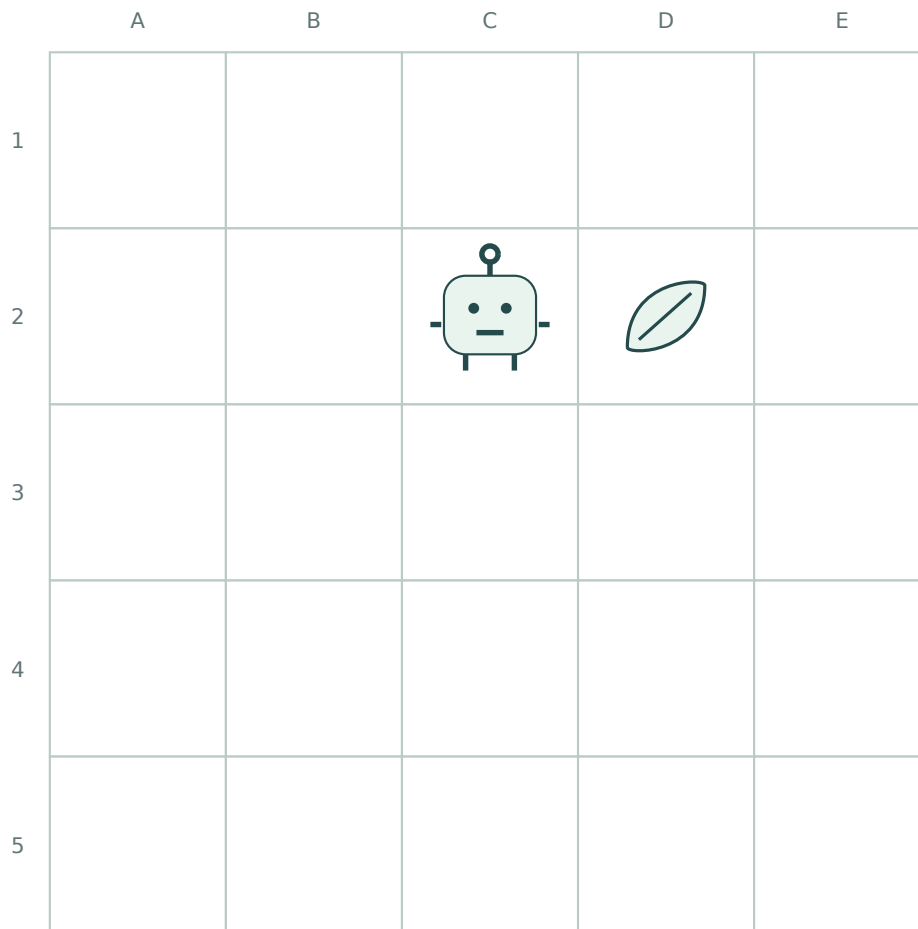
C    

Test each choice from the same starting square.

TRY WITH HELP

Choose the code

Which code takes the robot to the goal? Circle A, B or C.



A     

B     

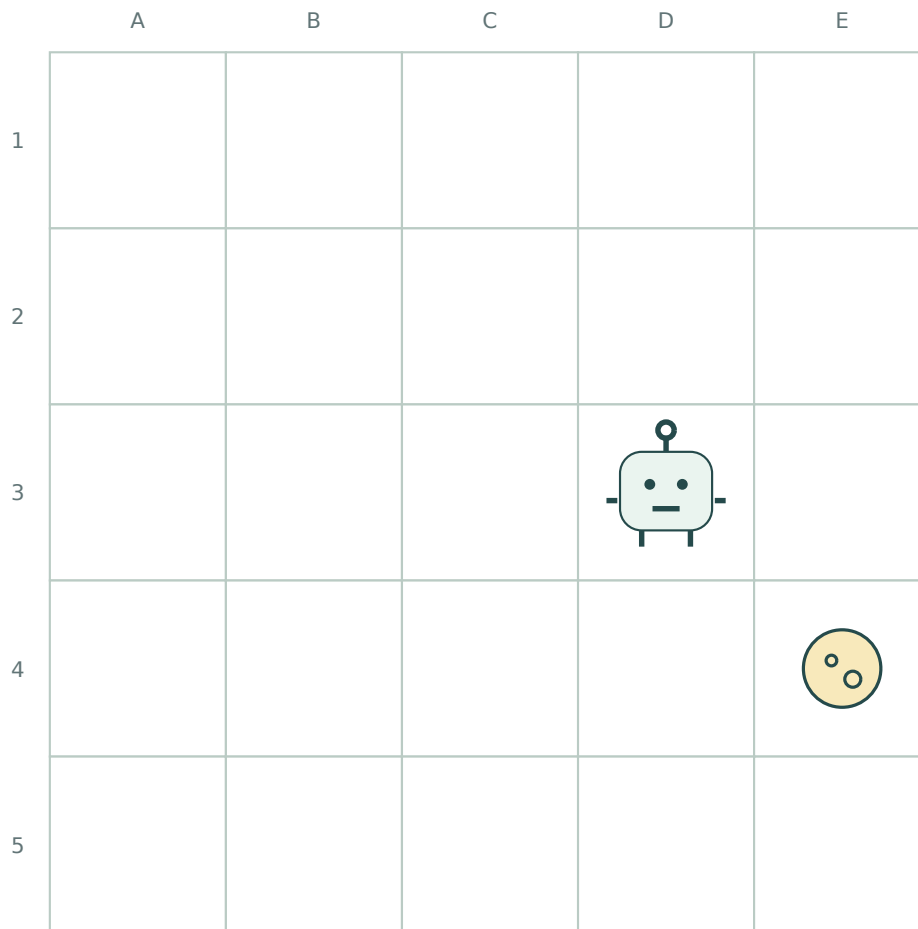
C     

Test each choice from the same starting square.

TRY WITH HELP

Choose the code

Which code takes the robot to the goal? Circle A, B or C.



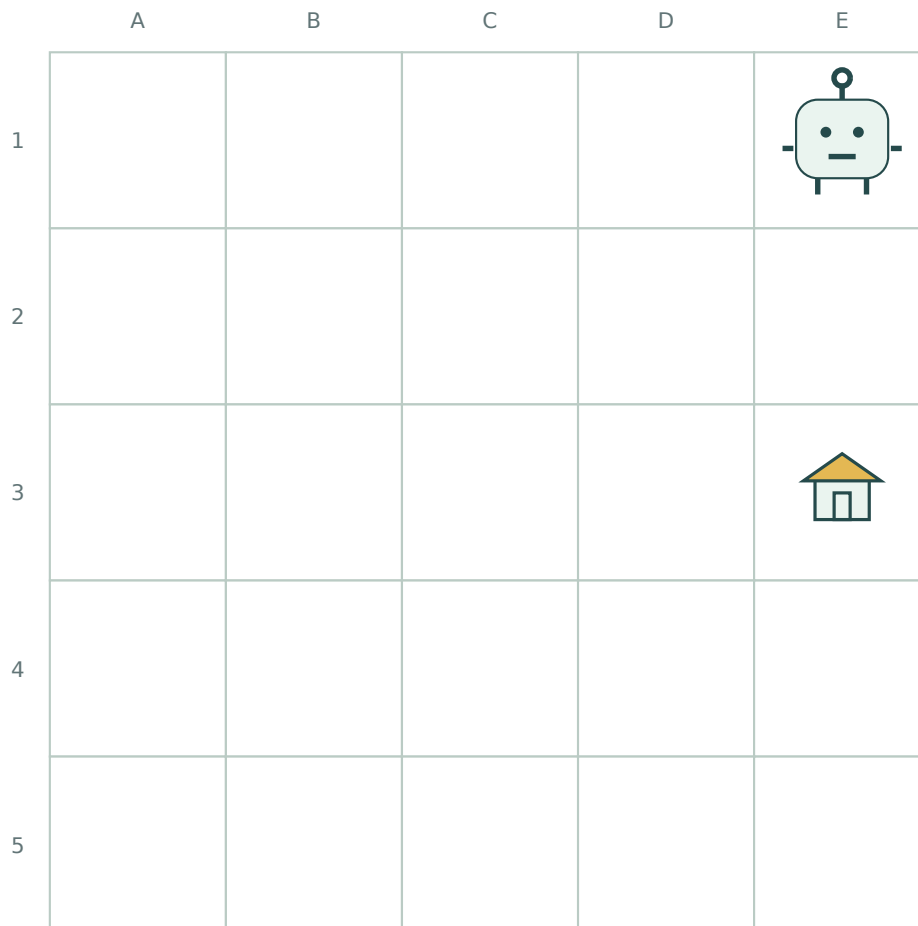
- A**      
- B**      
- C**      

Test each choice from the same starting square.

TRY WITH HELP

Choose the code

Which code takes the robot to the goal? Circle A, B or C.

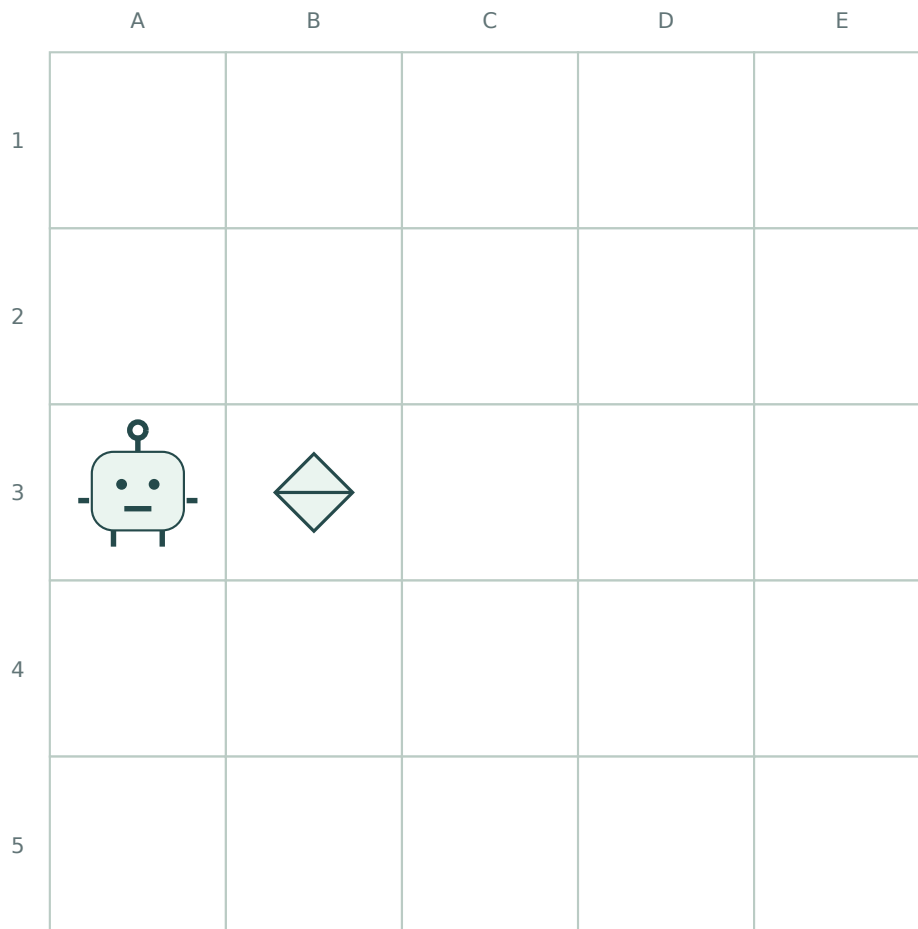


Test each choice from the same starting square.

TRY WITH HELP

Choose the code

Which code takes the robot to the goal? Circle A, B or C.



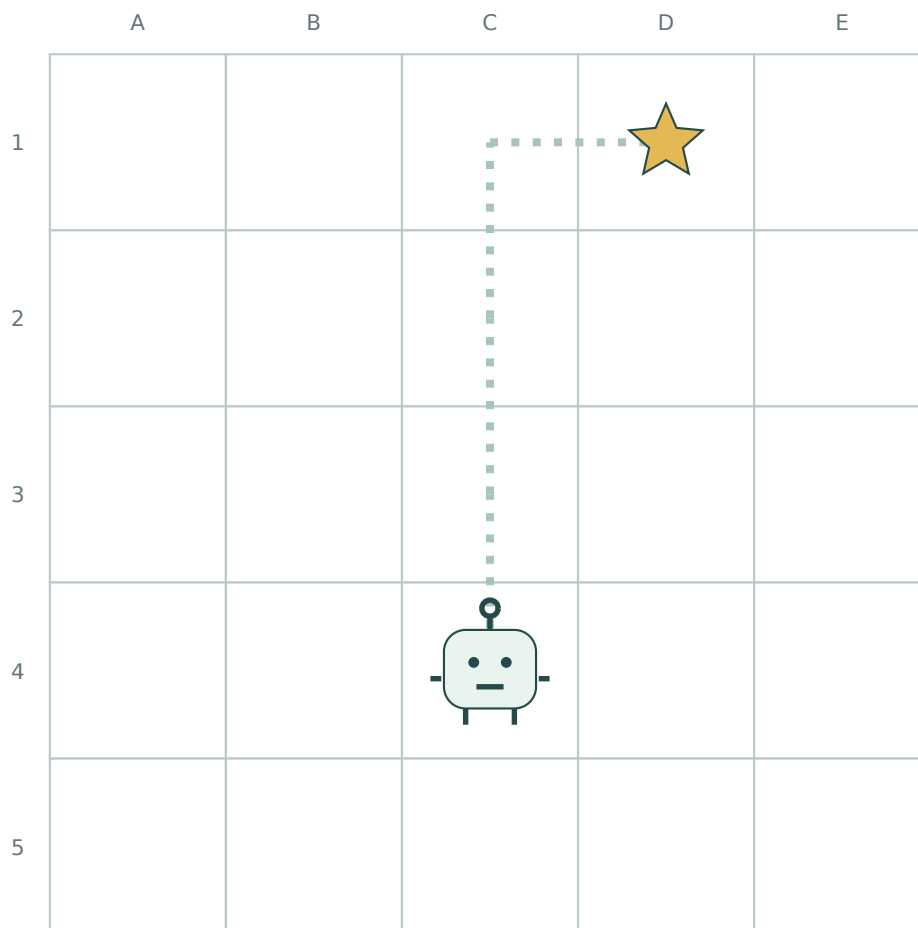
- A**     
- B**     
- C**     

Test each choice from the same starting square.

TRY WITH HELP

Complete the code

Follow the dotted route. Fill the two empty code boxes with arrows.



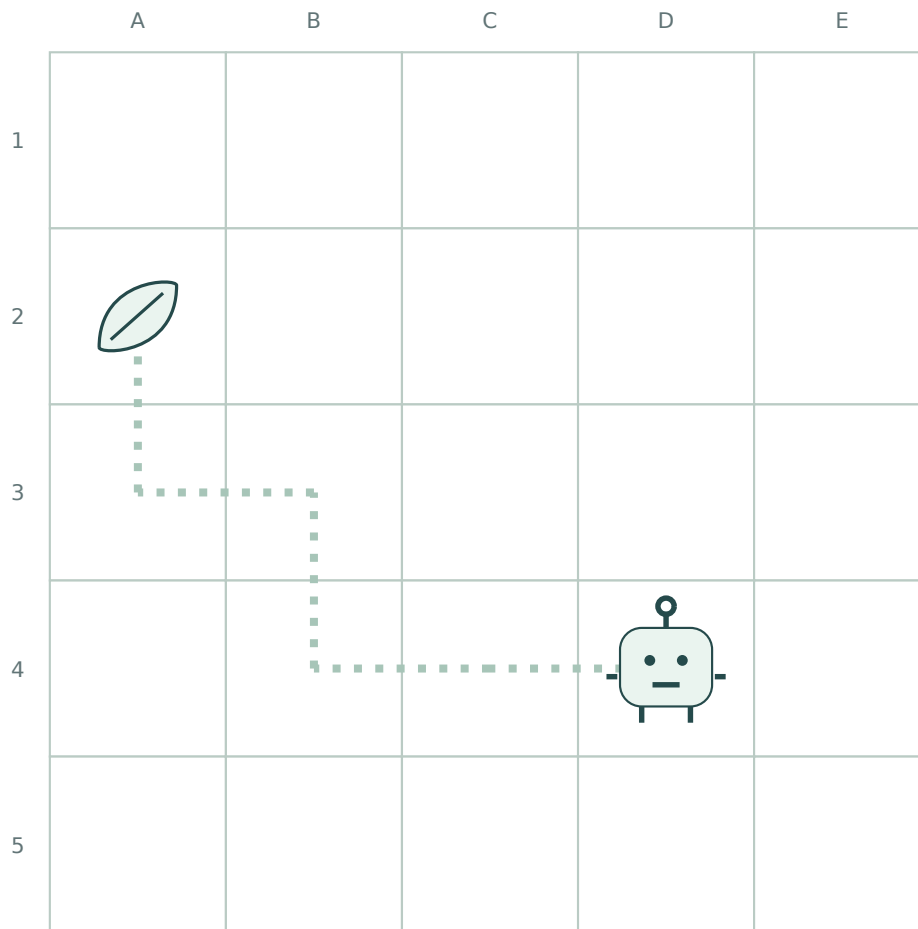
Write the complete code:

After filling the gaps, run the code again from the start.

TRY WITH HELP

Complete the code

Follow the dotted route. Fill the two empty code boxes with arrows.



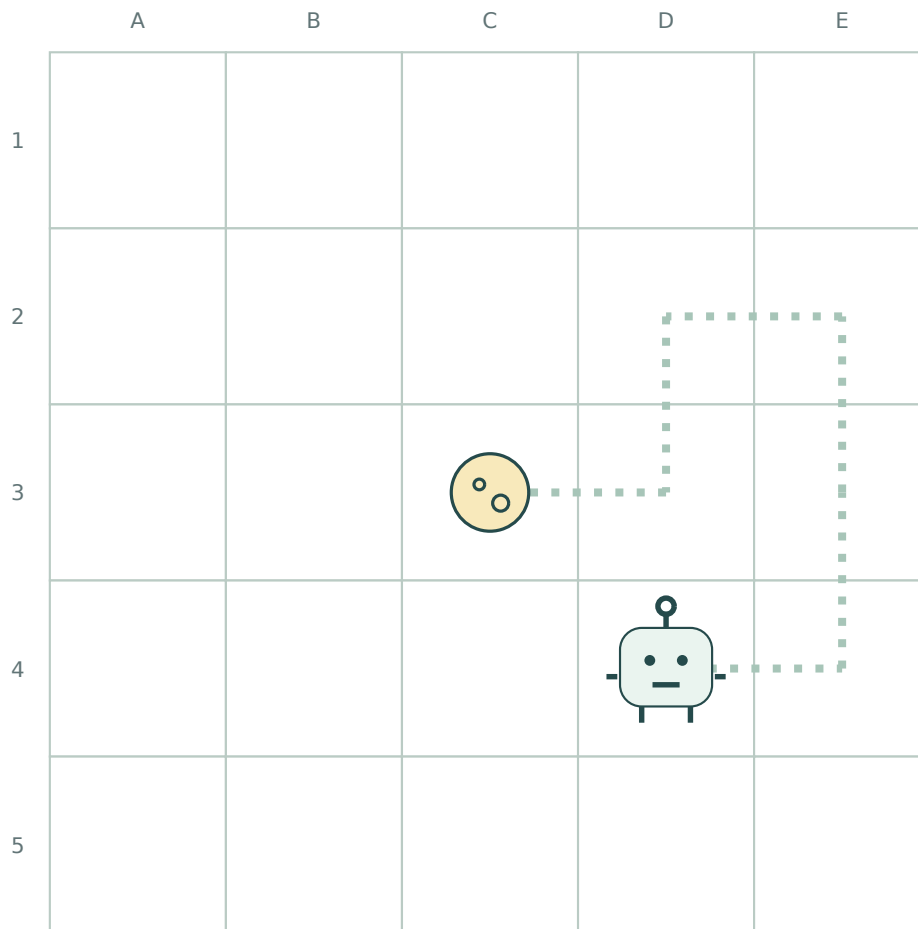
Write the complete code:

After filling the gaps, run the code again from the start.

TRY WITH HELP

Complete the code

Follow the dotted route. Fill the two empty code boxes with arrows.



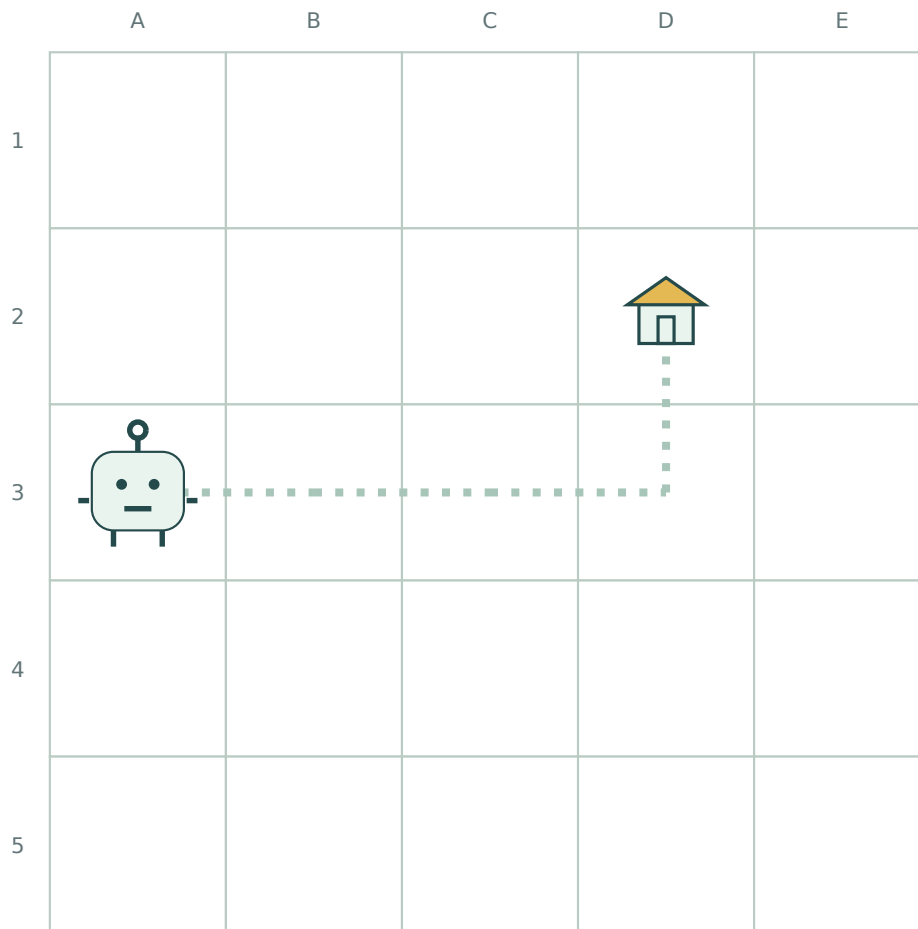
Write the complete code:

After filling the gaps, run the code again from the start.

TRY WITH HELP

Complete the code

Follow the dotted route. Fill the two empty code boxes with arrows.



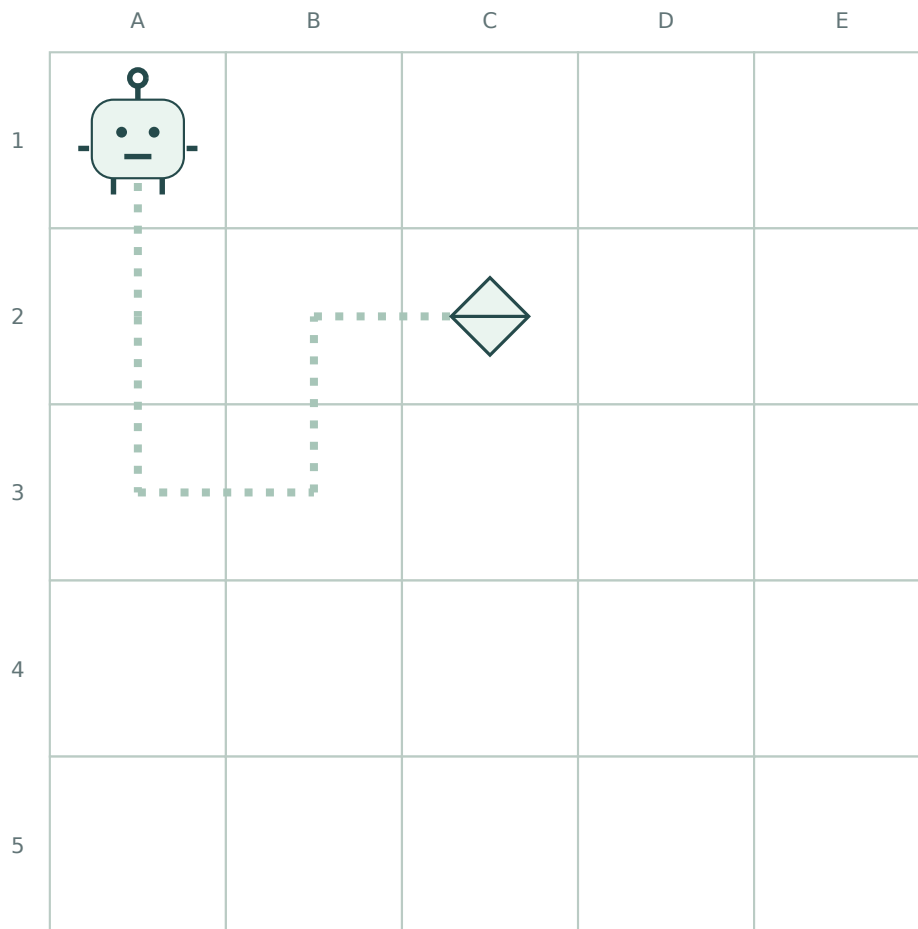
Write the complete code:

After filling the gaps, run the code again from the start.

TRY WITH HELP

Complete the code

Follow the dotted route. Fill the two empty code boxes with arrows.



?

?

→

↑

→

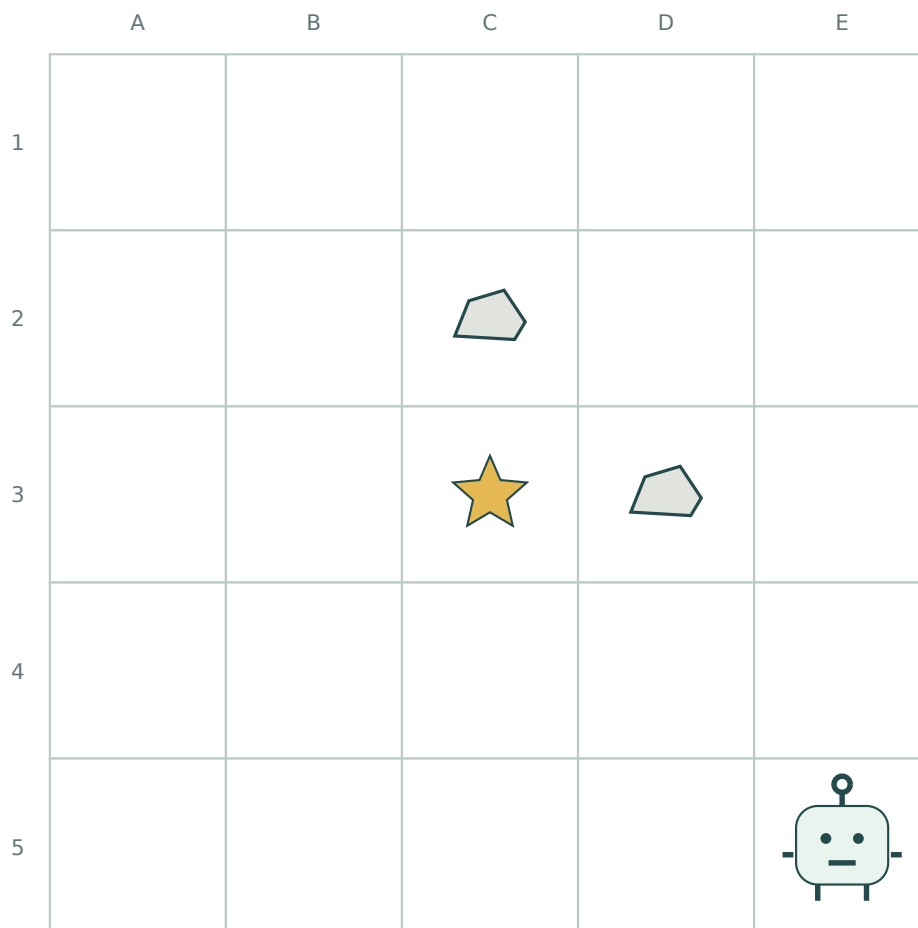
Write the complete code:

After filling the gaps, run the code again from the start.

TRY INDEPENDENTLY

Fix a command

The arrow in the green frame is wrong. Replace it so the robot reaches the goal.



↑

←

↑

↑

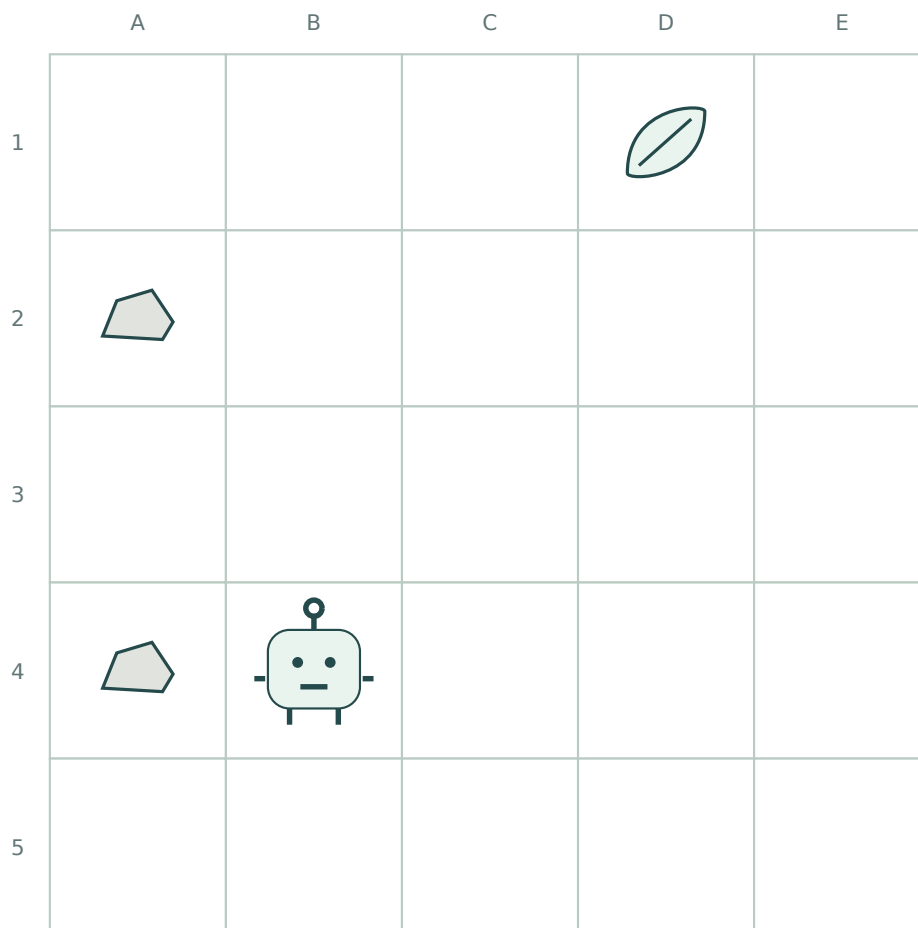
My replacement arrow:

Stay on the grid and avoid rocks. Test your corrected code.

TRY INDEPENDENTLY

Fix a command

The arrow in the green frame is wrong. Replace it so the robot reaches the goal.



My replacement arrow:

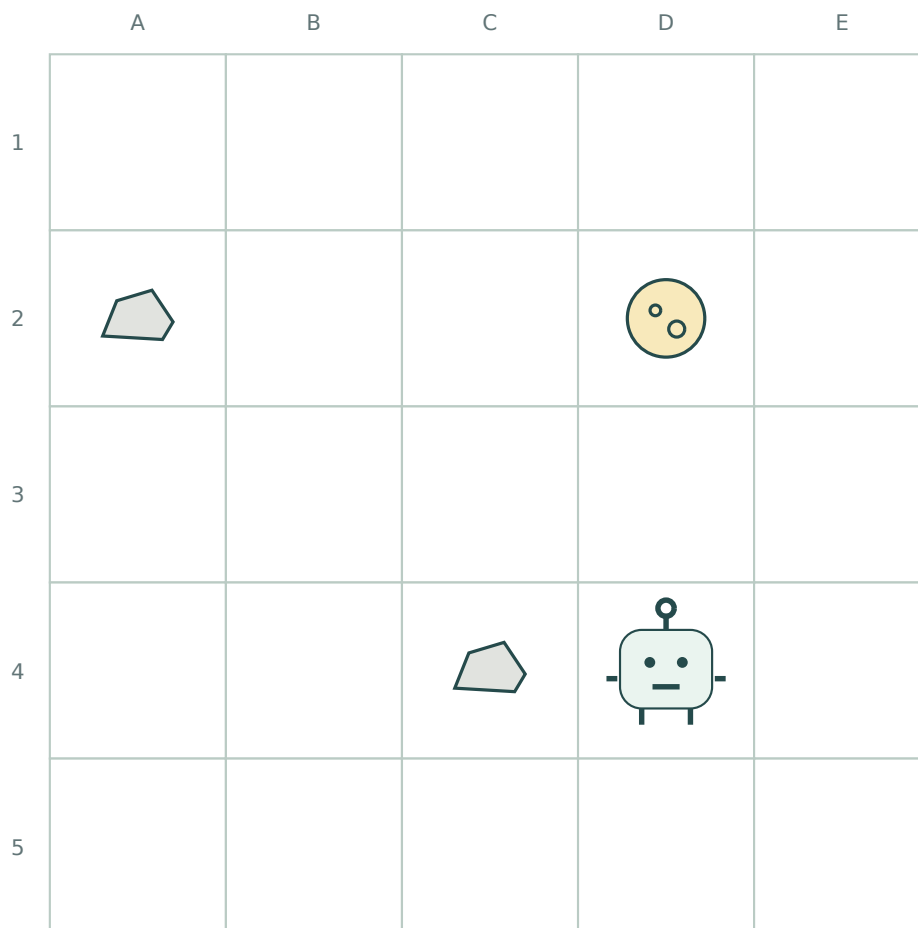


Stay on the grid and avoid rocks. Test your corrected code.

TRY INDEPENDENTLY

Fix a command

The arrow in the green frame is wrong. Replace it so the robot reaches the goal.



My replacement arrow:

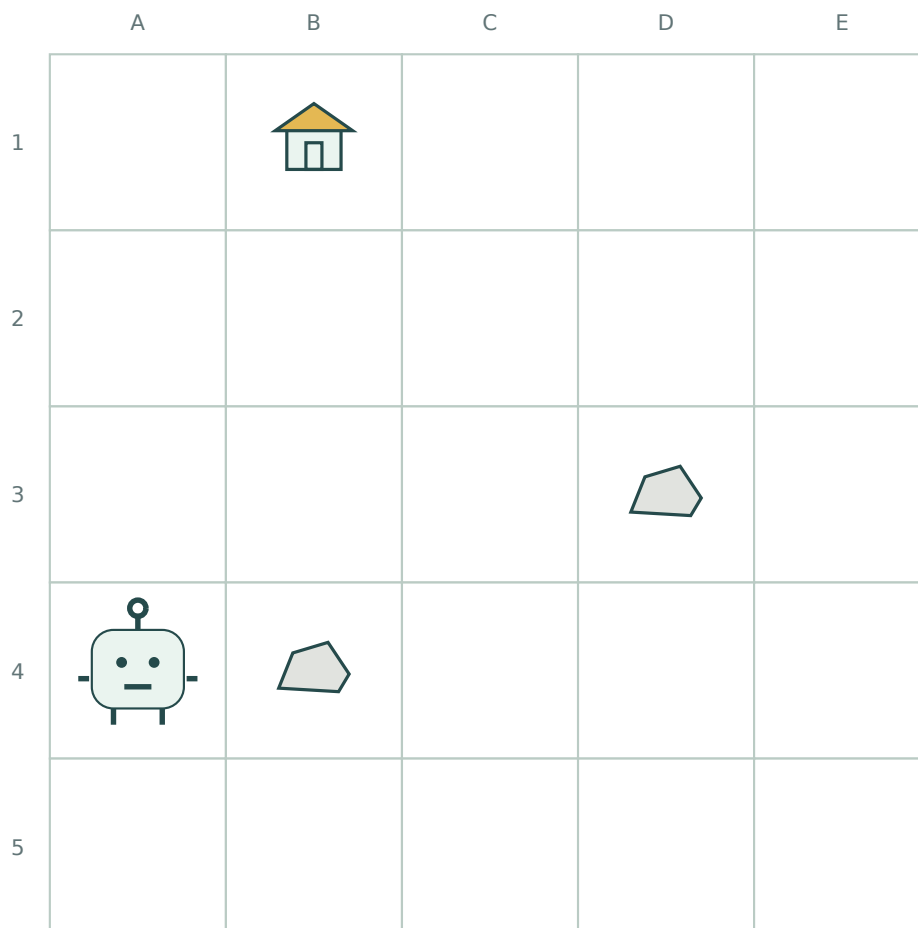


Stay on the grid and avoid rocks. Test your corrected code.

TRY INDEPENDENTLY

Fix a command

The arrow in the green frame is wrong. Replace it so the robot reaches the goal.



↑

↑

→

↓

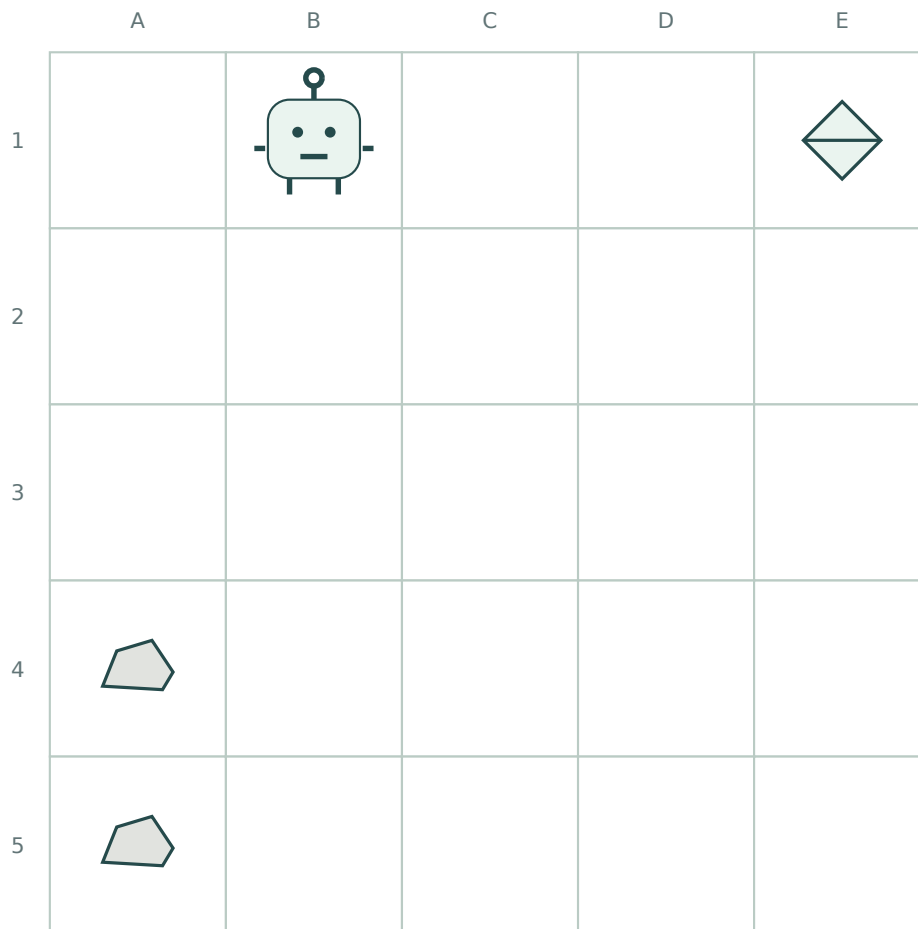
My replacement arrow:

Stay on the grid and avoid rocks. Test your corrected code.

TRY INDEPENDENTLY

Fix a command

The arrow in the green frame is wrong. Replace it so the robot reaches the goal.



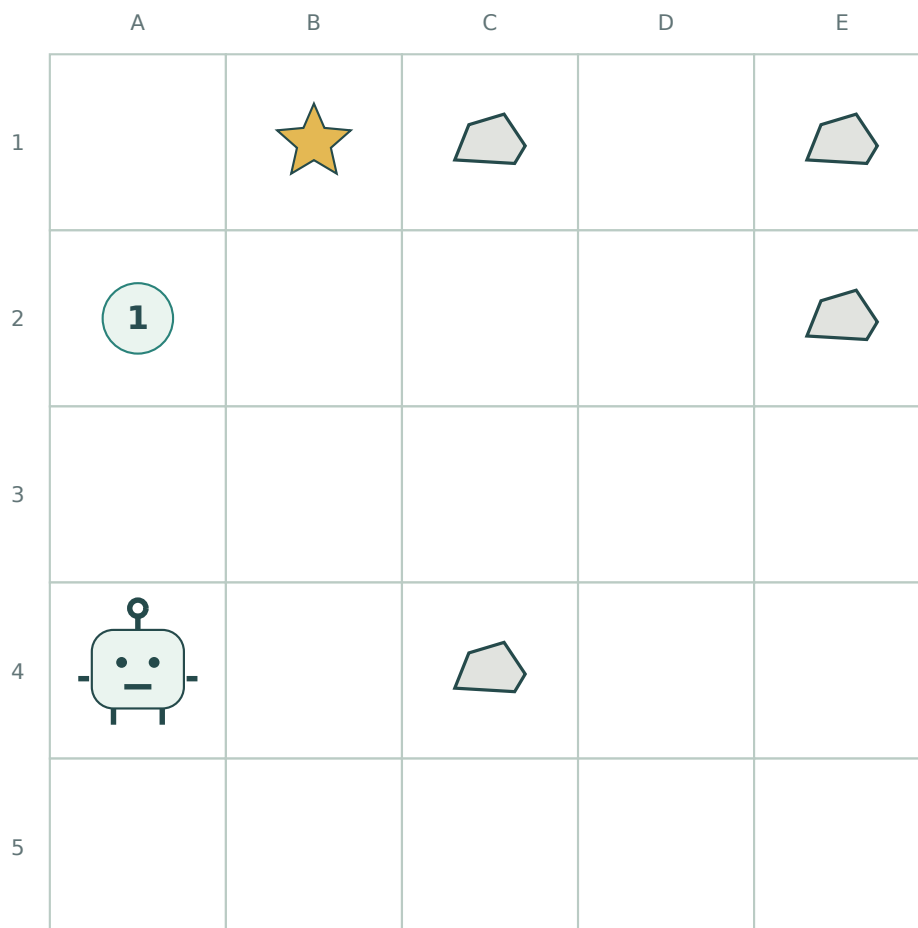
My replacement arrow:

Stay on the grid and avoid rocks. Test your corrected code.

TRY INDEPENDENTLY

Visit a waypoint

Visit circle 1, then the goal. Avoid rocks. Draw your route and write the code.



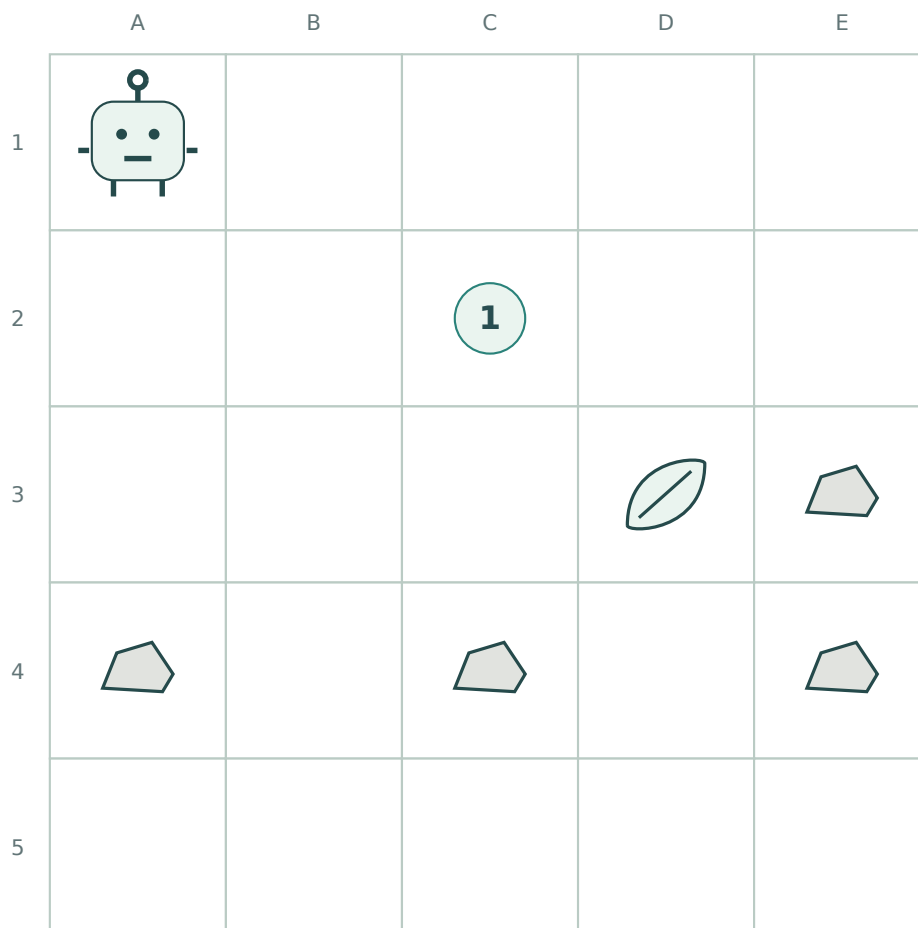
My code (more than one route may work):

Continue on spare paper if needed. One arrow moves one square.

TRY INDEPENDENTLY

Visit a waypoint

Visit circle 1, then the goal. Avoid rocks. Draw your route and write the code.



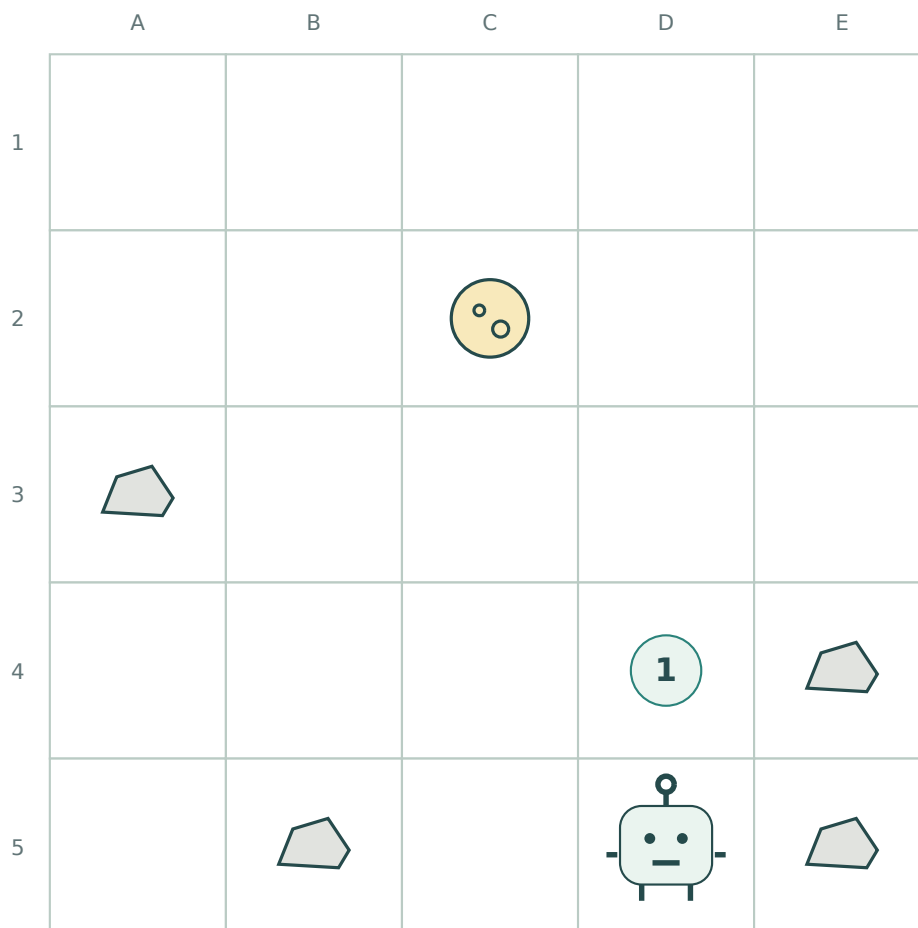
My code (more than one route may work):

Continue on spare paper if needed. One arrow moves one square.

TRY INDEPENDENTLY

Visit a waypoint

Visit circle 1, then the goal. Avoid rocks. Draw your route and write the code.



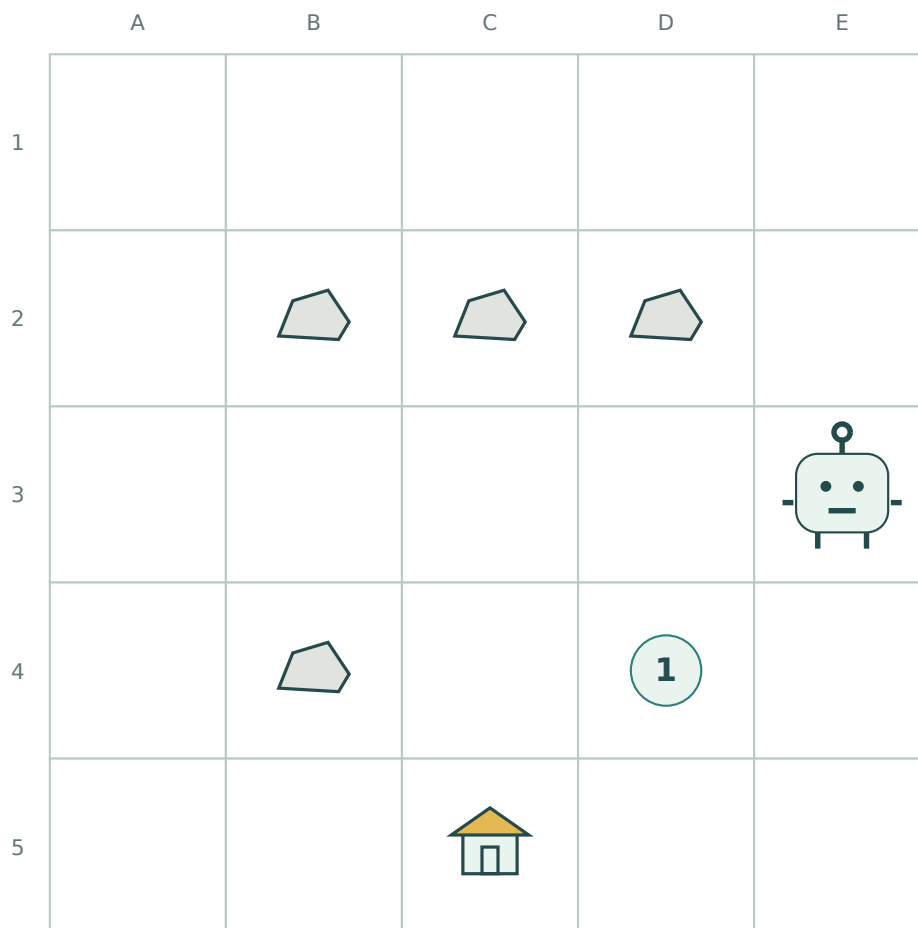
My code (more than one route may work):

Continue on spare paper if needed. One arrow moves one square.

TRY INDEPENDENTLY

Visit a waypoint

Visit circle 1, then the goal. Avoid rocks. Draw your route and write the code.



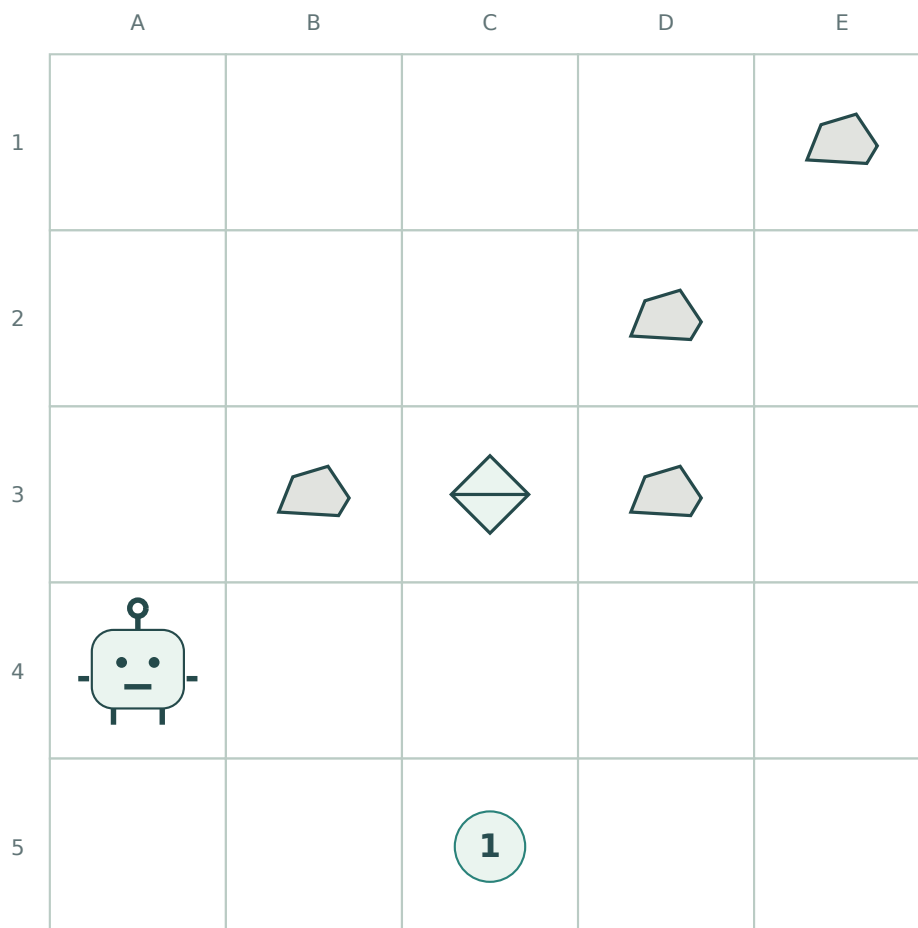
My code (more than one route may work):

Continue on spare paper if needed. One arrow moves one square.

TRY INDEPENDENTLY

Visit a waypoint

Visit circle 1, then the goal. Avoid rocks. Draw your route and write the code.



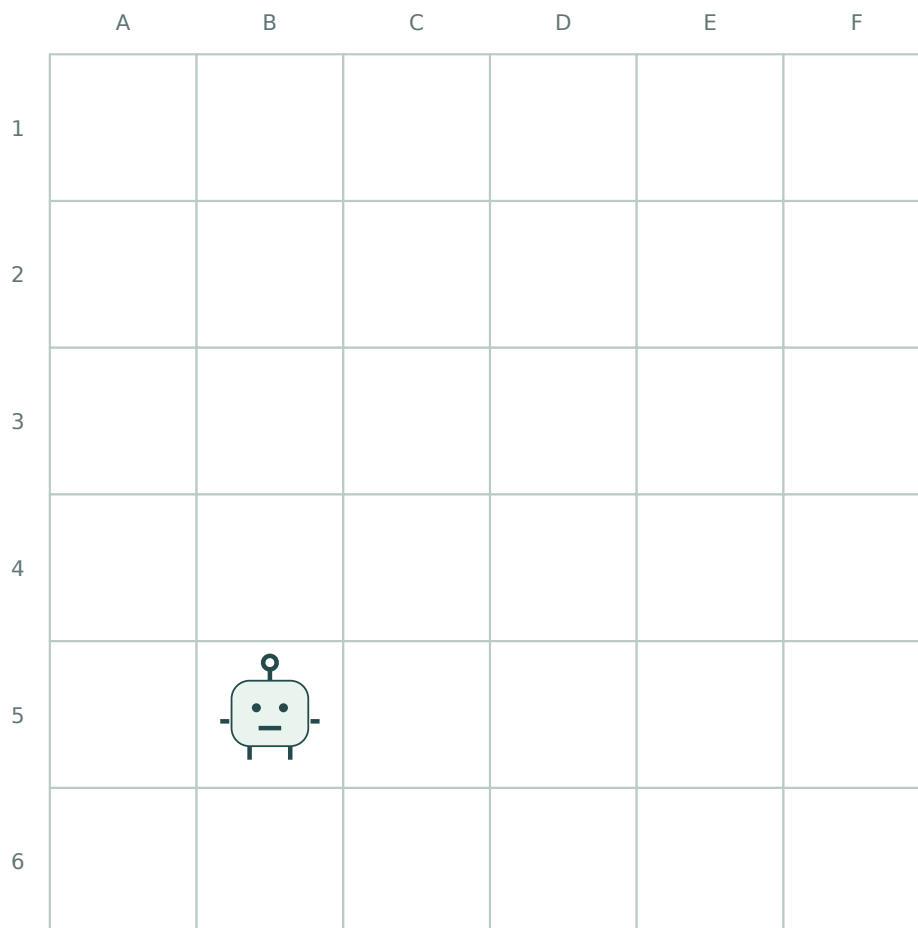
My code (more than one route may work):

Continue on spare paper if needed. One arrow moves one square.

CHALLENGE

Repeat a pattern

Repeat the arrow group 3 times. Draw the route and mark the final square.



Arrow group:



Repeat 3 times

Complete code:

--	--	--	--	--	--

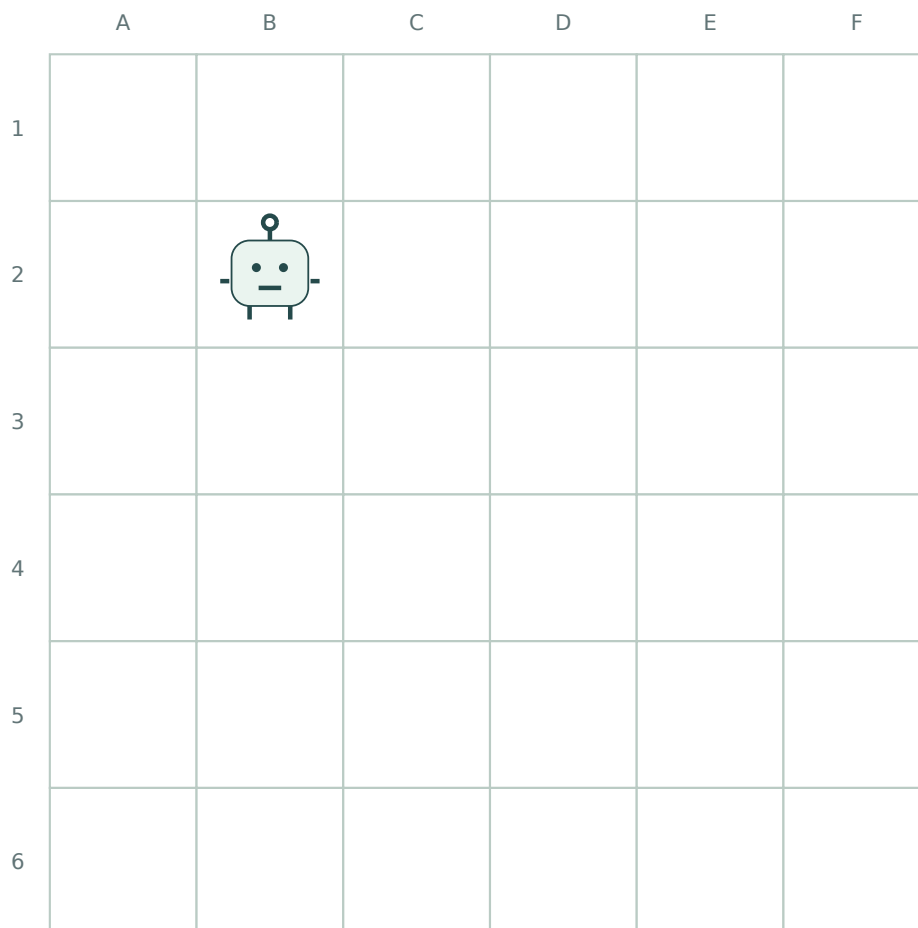
Steps:

Final square:

CHALLENGE

Repeat a pattern

Repeat the arrow group 3 times. Draw the route and mark the final square.



Arrow group:



Repeat 3 times

Complete code:

--	--	--	--	--	--

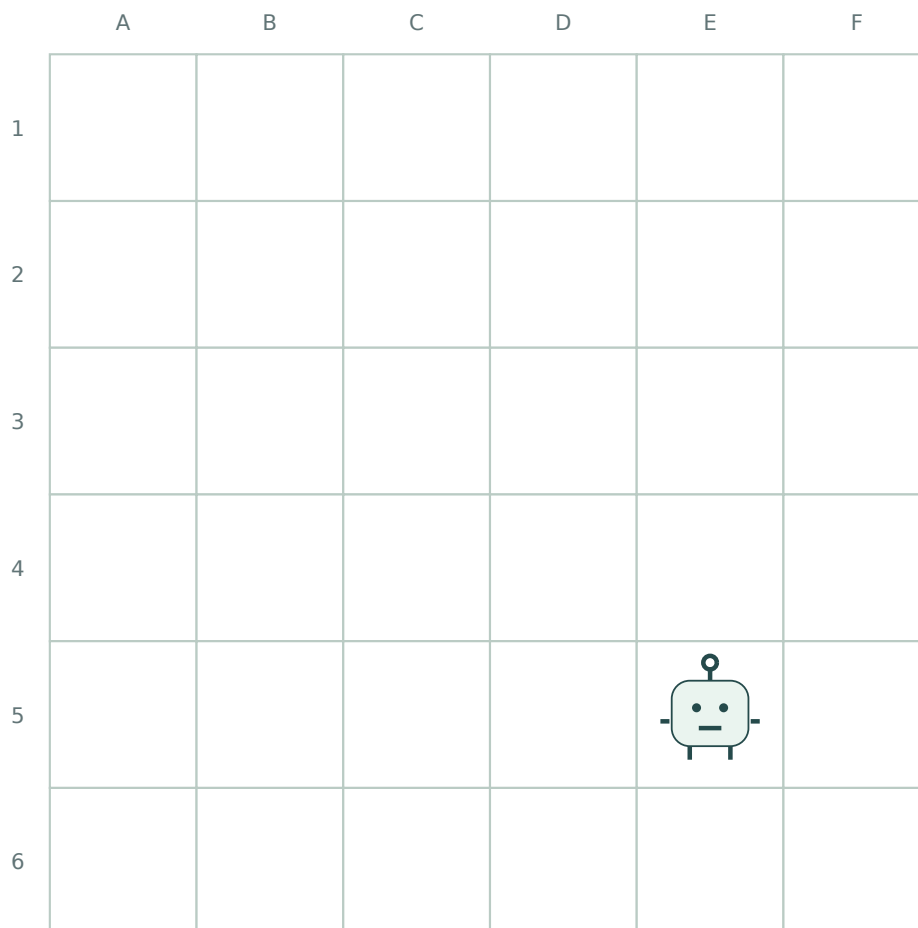
Steps:

Final square:

CHALLENGE

Repeat a pattern

Repeat the arrow group 3 times. Draw the route and mark the final square.



Arrow group:



Repeat 3 times

Complete code:

--	--	--	--	--	--

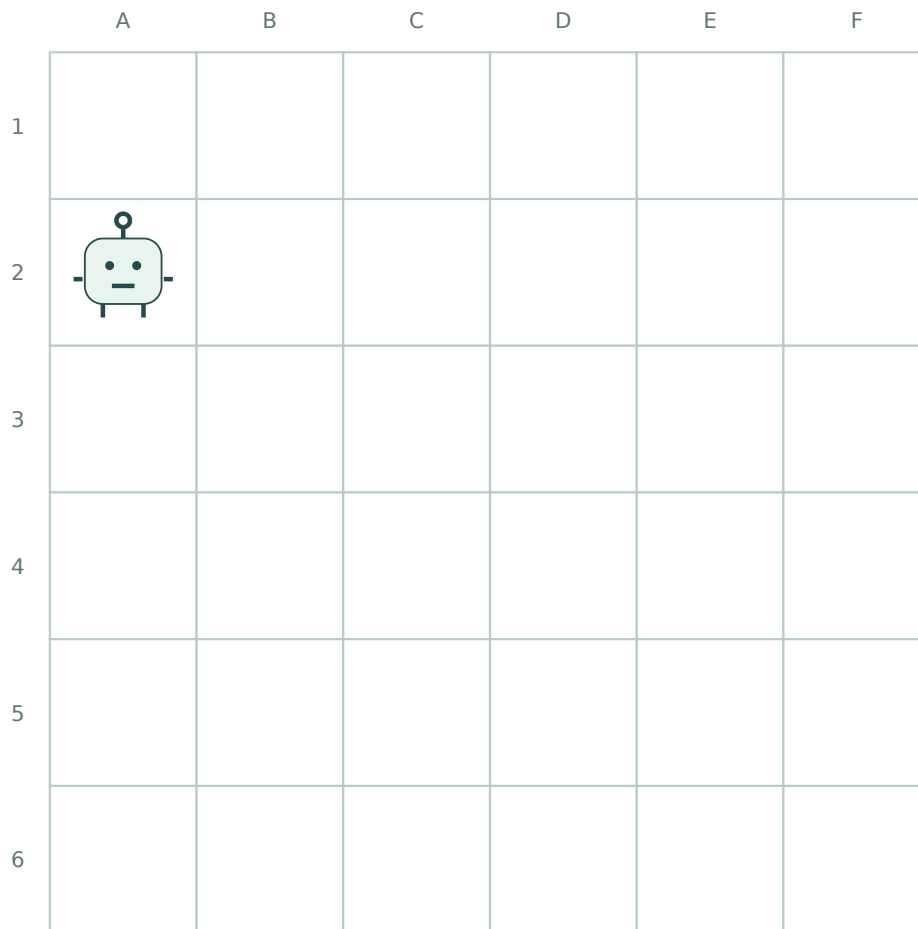
Steps:

Final square:

CHALLENGE

Repeat a pattern

Repeat the arrow group 2 times. Draw the route and mark the final square.



Arrow group:



Repeat 2 times

Complete code:

--	--	--	--	--	--

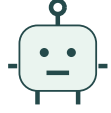
Steps:

Final square:

CHALLENGE

Repeat a pattern

Repeat the arrow group 2 times. Draw the route and mark the final square.

	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						

Arrow group:



Repeat 2 times

Complete code:

--	--	--	--	--	--

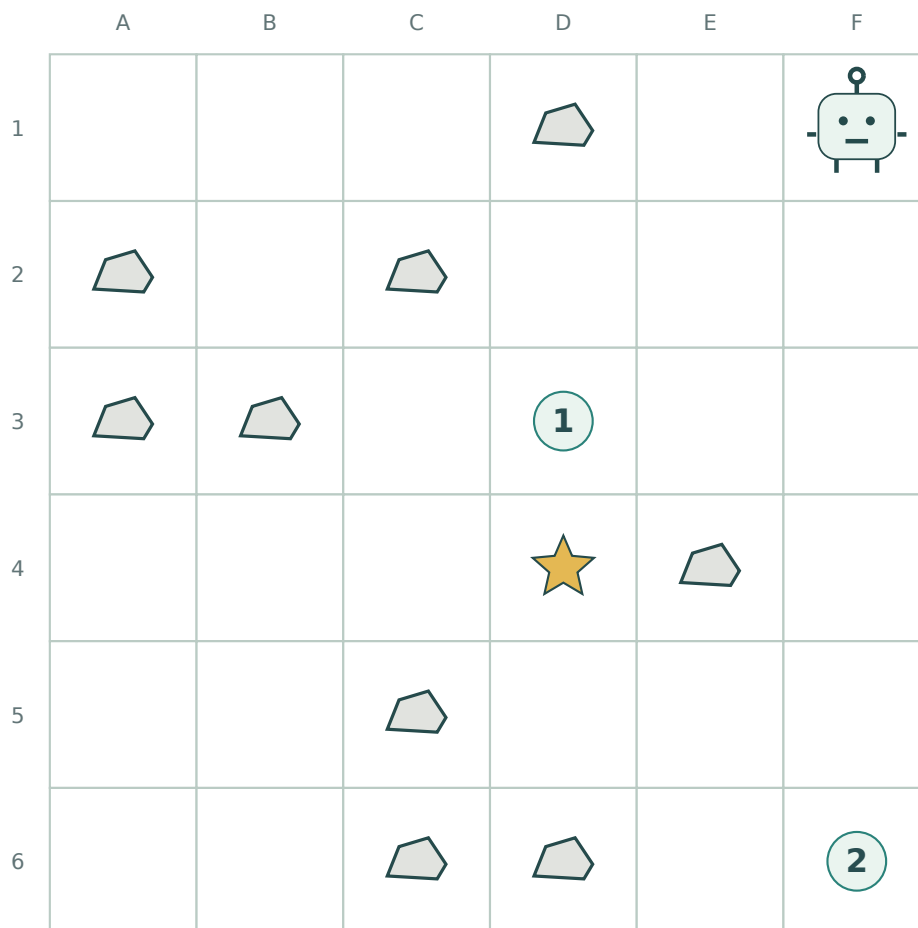
Steps:

Final square:

CHALLENGE

Design a route

Visit circle 1, then 2, then the goal. Avoid rocks. Find a shortest route.



Plan your code, then test it with a finger:

Steps in my route:

Tested:

CHALLENGE

Design a route

Visit circle 1, then 2, then the goal. Avoid rocks. Find a shortest route.



Plan your code, then test it with a finger:

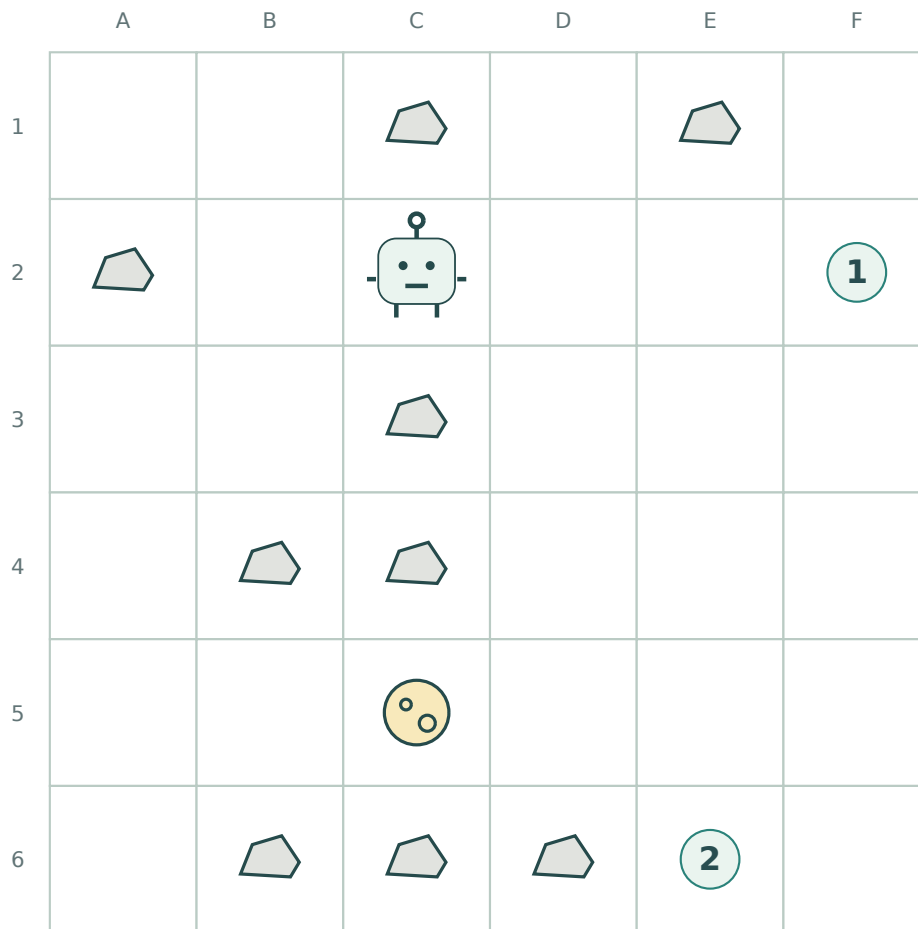
Steps in my route:

Tested:

CHALLENGE

Design a route

Visit circle 1, then 2, then the goal. Avoid rocks. Find a shortest route.



Plan your code, then test it with a finger:

Steps in my route:

Tested:

CHALLENGE

Design a route

Visit circle 1, then 2, then the goal. Avoid rocks. Find a shortest route.



Plan your code, then test it with a finger:

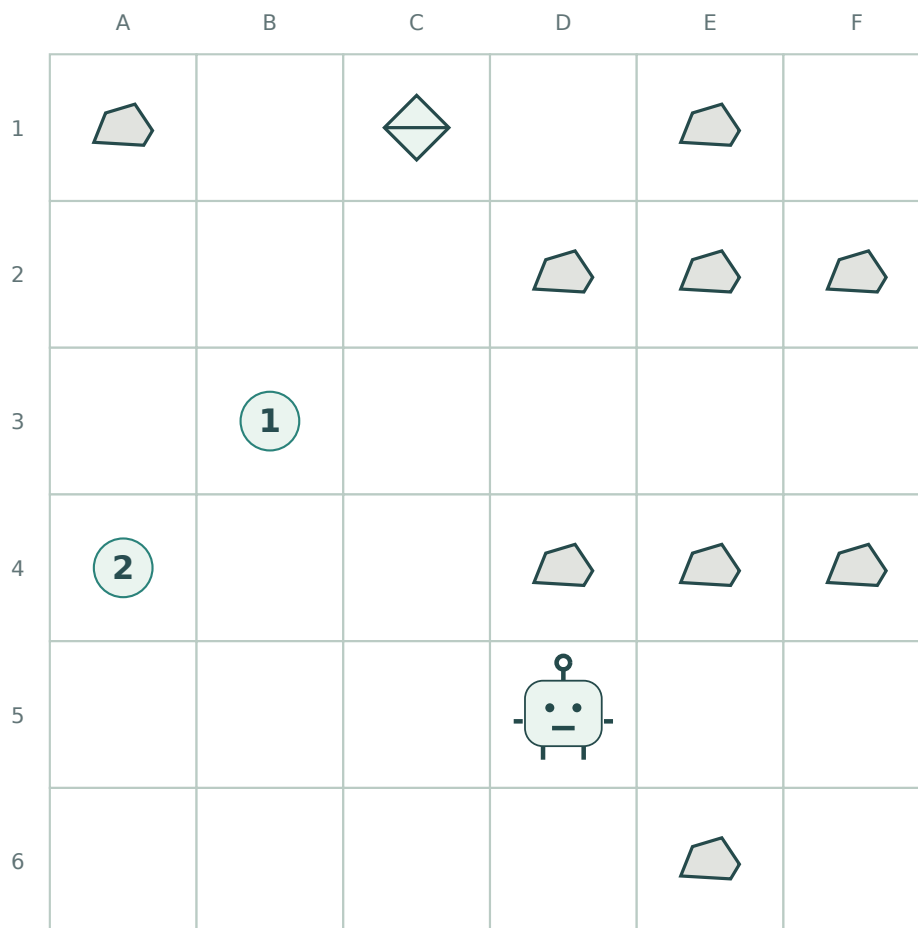
Steps in my route:

Tested:

CHALLENGE

Design a route

Visit circle 1, then 2, then the goal. Avoid rocks. Find a shortest route.



Plan your code, then test it with a finger:

Steps in my route:

Tested:

Answers and grown-up notes

Activity 01

1: right 1 square(s); 2: left 2 square(s); 3: up 1 square(s)

Activity 02

1: left 2 square(s); 2: up 1 square(s); 3: down 2 square(s)

Activity 03

1: up 1 square(s); 2: down 2 square(s); 3: right 1 square(s)

Activity 04

1: down 2 square(s); 2: right 1 square(s); 3: left 2 square(s)

Activity 05

1: right 2 square(s); 2: left 3 square(s); 3: up 2 square(s)

Activity 06

→ ↓ → ↑; 4 steps; stop at E1.

Activity 07

→ ↑ ↑ ↑ →; 5 steps; stop at C2.

Activity 08

↑ ← ↓ ← ← ↓; 6 steps; stop at B5.

For open answers, accept other ways that meet the instructions. Listen to your child.

Answers and grown-up notes

Activity 09

← ↓ ↓ →; 4 steps; stop at B3.

Activity 10

↓ ← ↑ ↑ ←; 5 steps; stop at C1.

Activity 11

Choice C.

Activity 12

Choice A.

Activity 13

Choice A.

Activity 14

Choice C.

Activity 15

Choice A.

Activity 16

Box 1: up; Box 2: up.

For open answers, accept other ways that meet the instructions. Listen to your child.

Answers and grown-up notes

Activity 17

Box 3: up; Box 4: left.

Activity 18

Box 1: right; Box 5: down.

Activity 19

Box 3: right; Box 4: up.

Activity 20

Box 1: down; Box 2: down.

Activity 21

Box 1: change up to left.

Activity 22

Box 1: change down to up.

Activity 23

Box 2: change left to right.

Activity 24

Box 4: change down to up.

For open answers, accept other ways that meet the instructions. Listen to your child.

Answers and grown-up notes

Activity 25

Box 2: change left to right.

Activity 26

Example: $\uparrow \uparrow \rightarrow \uparrow$ (4 steps). Other valid routes may work.

Activity 27

Example: $\rightarrow \rightarrow \downarrow \rightarrow \downarrow$ (5 steps). Other valid routes may work.

Activity 28

Example: $\uparrow \leftarrow \uparrow \uparrow$ (4 steps). Other valid routes may work.

Activity 29

Example: $\leftarrow \downarrow \leftarrow \downarrow$ (4 steps). Other valid routes may work.

Activity 30

Example: $\rightarrow \rightarrow \downarrow \uparrow \uparrow$ (5 steps). Other valid routes may work.

Activity 31

$\rightarrow \uparrow \rightarrow \uparrow \rightarrow \uparrow$; 6 steps; stop at E2.

Activity 32

$\downarrow \rightarrow \downarrow \rightarrow \downarrow \rightarrow$; 6 steps; stop at E5.

For open answers, accept other ways that meet the instructions. Listen to your child.

Answers and grown-up notes

Activity 33

← ↑ ← ↑ ← ↑; 6 steps; stop at B2.

Activity 34

→ → ↓ → → ↓; 6 steps; stop at E4.

Activity 35

↑ ← ← ↑ ← ←; 6 steps; stop at B4.

Activity 36

Example: ← ↓ ← ↓ → → ↓ ↓ ↓ ← ↑ ← ↑ (13 steps). Other valid routes may work.

Activity 37

Example: → → ↓ ↓ ↓ → ↑ ↑ ← ↑ (10 steps). Other valid routes may work.

Activity 38

Example: → → → ← ↓ ↓ ↓ ↓ ↑ ← ← (11 steps). Other valid routes may work.

Activity 39

Example: ↑ → ↑ → ↓ ↓ → ↓ ↓ → ↑ ↑ ↑ ↑ (14 steps). Other valid routes may work.

Activity 40

Example: ← ← ↑ ↑ ← ↓ → → ↑ ↑ ↑ (11 steps). Other valid routes may work.

For open answers, accept other ways that meet the instructions. Listen to your child.