



Lesson 1 | Warmup

This is a Pixel Bots exercise. In Pixel Bots we will program bots to paint pictures using Code Elements.

Code Elements



Problem 1

Pixel Bot Read Code: You are a pixel bot. Read the code and paint the picture.





Lesson 1 | Worksheet 1

This is a Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

Code Elements



Example



Problems

You are a pixel bot. Read the code and paint the picture.





Lesson 1 | Worksheet 1 (cont'd)



1	↓
2	↖
3	←
4	↗



1	↖
2	←
3	↖
4	↓
5	↖



1	↖
2	↑
3	↖
4	↑
5	↖





Lesson 2 | Warmup

This is a Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

Code Elements



Example



1	→
2	☑
3	↑
4	↑
5	☑

Problems

You are a pixel bot. Read the code and paint the picture.



1	↑
2	→
3	☑
4	↑
5	→
6	☑
7	↓
8	↓
9	☑





Lesson 2 | Worksheet 1

This is a Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

Code Elements



Problem

You are a coder. Write code to command the pixel bot to paint the picture.



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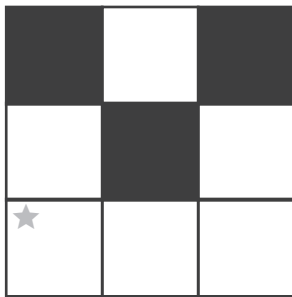


Lesson 4 | Worksheet 1

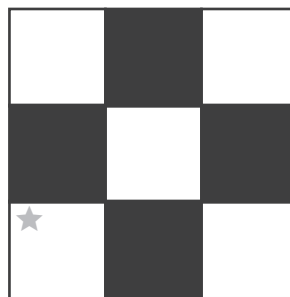
This is an online Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

Problems

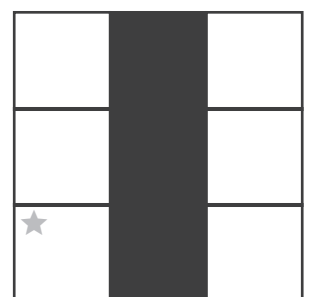
You are a coder. Write code to command the pixel bot to paint the pictures.



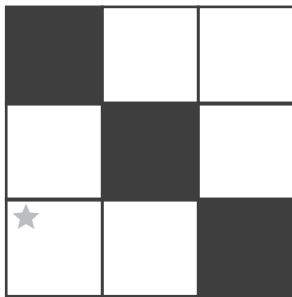
- ☐ done
- ☐ explained



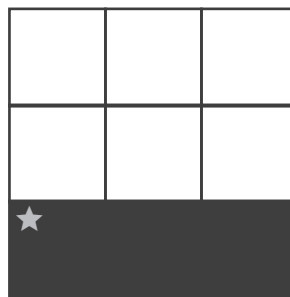
- ☐ done
- ☐ explained



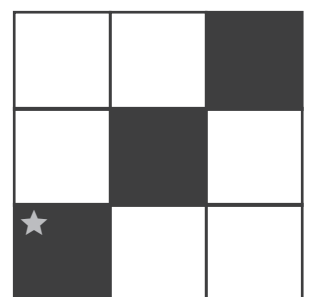
- ☐ done
- ☐ explained



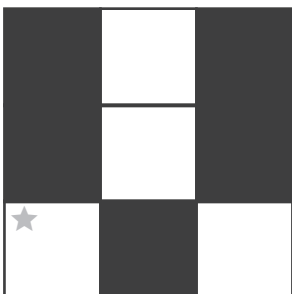
- ☐ done
- ☐ explained



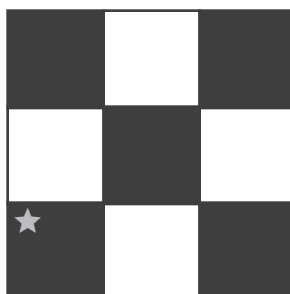
- ☐ done
- ☐ explained



- ☐ done
- ☐ explained



- ☐ done
- ☐ explained



- ☐ done
- ☐ explained





Lesson 4 | Exit Ticket

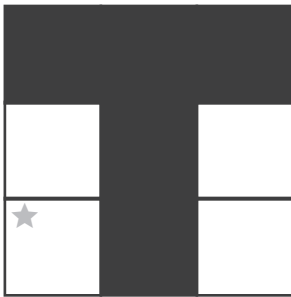
This is a Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

Code Elements



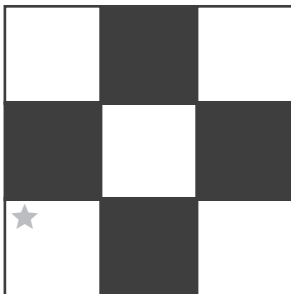
Problem

You are a coder. Write code to command the pixel bot to paint the picture.



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Lesson 6 | Warmup

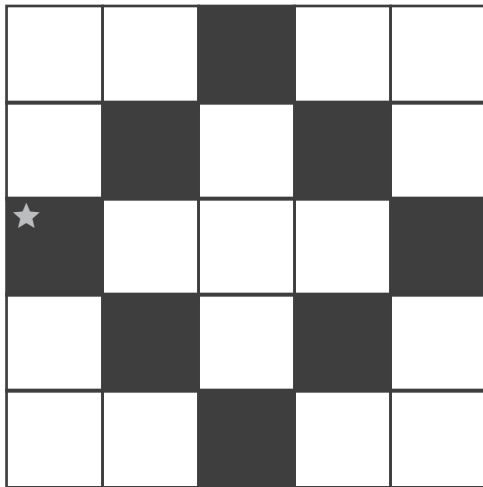
This is a Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

Code Elements



Problem

You are a coder. Write code to command the pixel bot to paint the picture.



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Lesson 6 | Worksheet 1

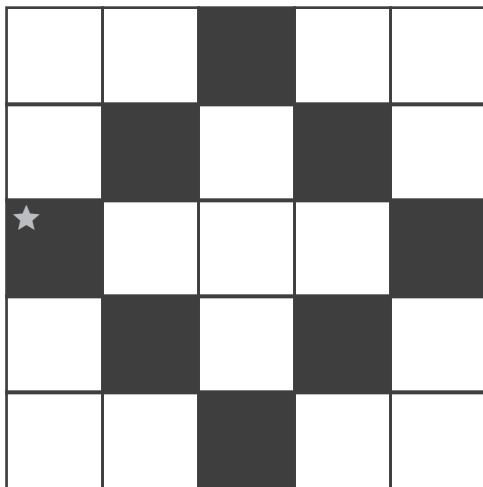
This is a Pixel Bots JavaScript exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

Code Elements

up() down()
left() right()
paint()

Problem

You are a coder. Write code to command the pixel bot to paint the picture.



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Lesson 6 | Worksheet 2

This is a Dance Bot exercise. In Dance Bot we program bots to dance.

Code Elements

<code>up()</code>	<code>down()</code>
<code>left()</code>	<code>right()</code>
<code>spinLeft()</code>	<code>spinRight()</code>
<code>wait()</code>	

Problem

You are a coder. Write code to command your bot to perform the same dance your teacher is doing.

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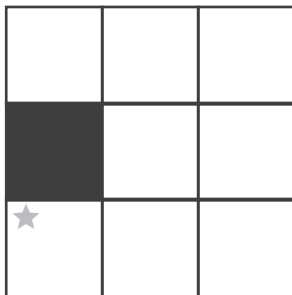


Lesson 7 | Worksheet 1

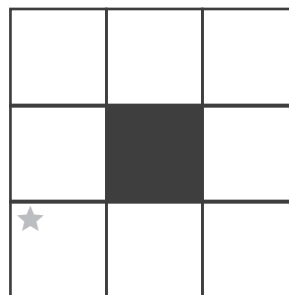
This is an online Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

Problems

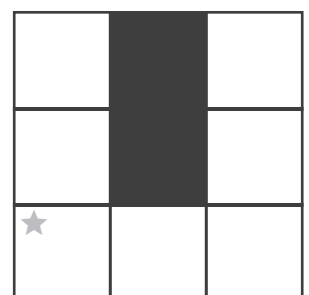
You are a coder. Write code to command the pixel bot to paint the pictures.



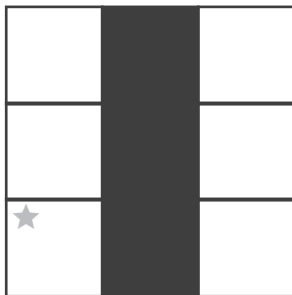
- ☐ done
- ☐ explained



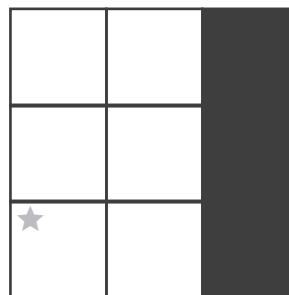
- ☐ done
- ☐ explained



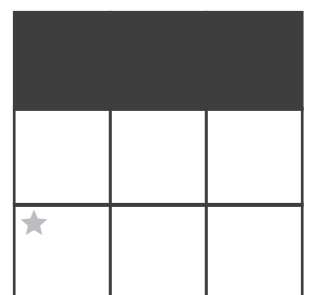
- ☐ done
- ☐ explained



- ☐ done
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- ☐ done
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- ☐ done
- ☐ explained



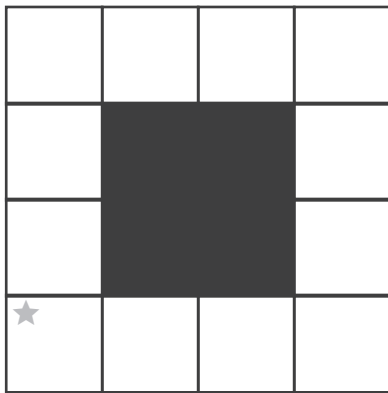


Lesson 7 | Worksheet 2

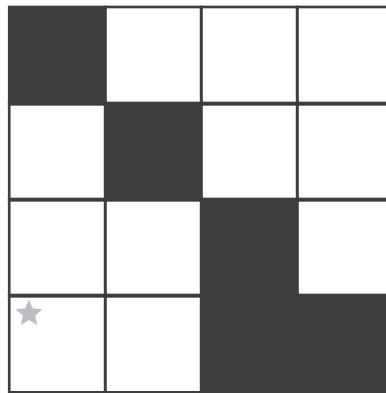
This is an online Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

Problems

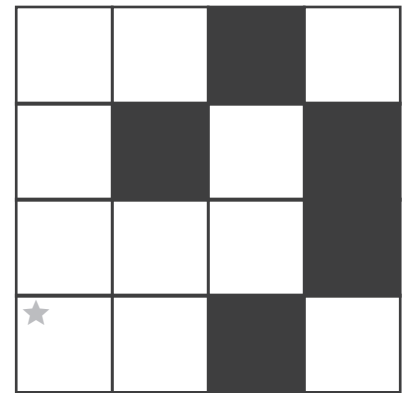
You are a coder. Write code to command the pixel bot to paint the pictures.



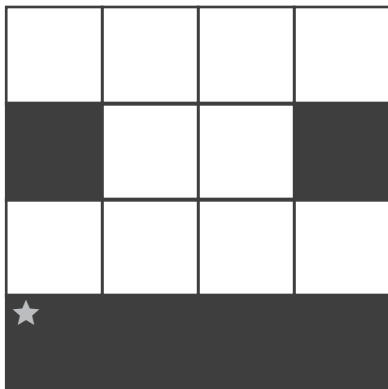
- ☐ done
- ☐ explained



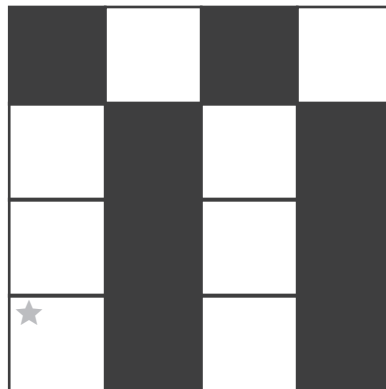
- ☐ done
- ☐ explained



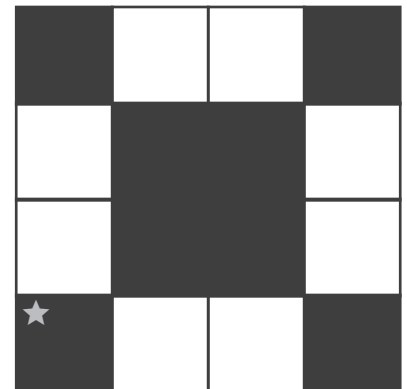
- ☐ done
- ☐ explained



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Lesson 7 | Exit Ticket

This is a Pixel Bots JavaScript exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

Code Elements

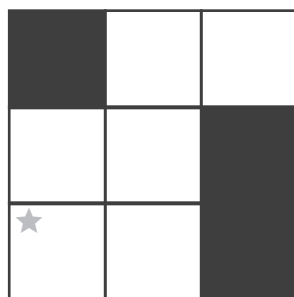
up() down()
left() right()
paint()

Problems

1) Which of the following has a syntax error:

- a. up()
- b. down()
- c. right)
- d. left()

2) You are a coder. Write code to command the pixel bot to paint the picture.



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Lesson 8 | Warm-up

This is a Pixel Bots JavaScript exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

Code Elements

up() down()
left() right()
paint()

Problems

You are a coder. Write code to command the pixel bot to paint the picture.



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Lesson 8 | Exit Ticket

This is a Mouse Bot JavaScript exercise. In Mouse Bot we program the bot to eat the cheese.

Code Elements

faceUp()
faceRight()
move()
getCheese()

Problems

You are a coder. Write code to command the pixel bot to paint the picture.



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Lesson 9 | Warm Up

This is a Mouse Bot JavaScript exercise. In Mouse Bot we program the bot to eat the cheese.

Code Elements

faceUp() move()
faceRight() getCheese()

Problems

You are a coder. Write code to command the pixel bot to paint the picture.



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Coders & Bots

Coders



Navigator: You are responsible for the overall plan for the program. Guide the Writer and keep track of what your program is doing.



Writer: Add code to your program. Pay attention to syntax.

Bots



Stepper: Step through the program and read each step aloud. Keep your finger on the step you are reading.



Actor: Listen carefully to each line of code the Stepper says aloud. Using the materials available, show what each line of code does.



Coding Paper

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Coding Paper

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Coding Paper

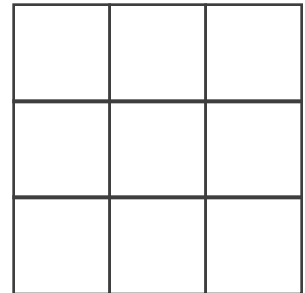
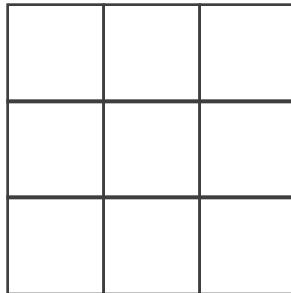
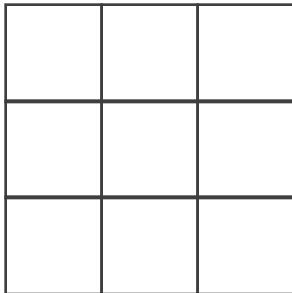
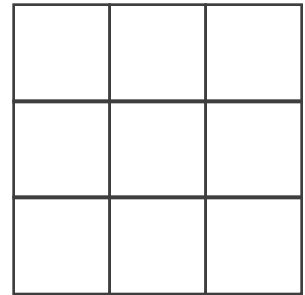
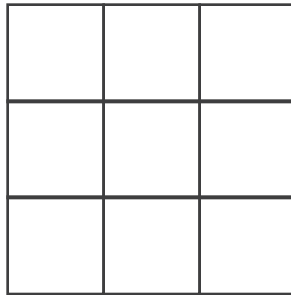
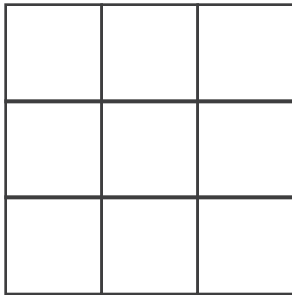
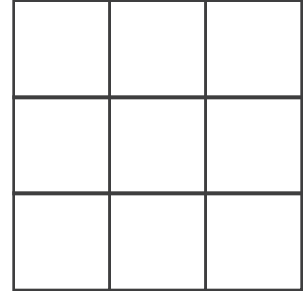
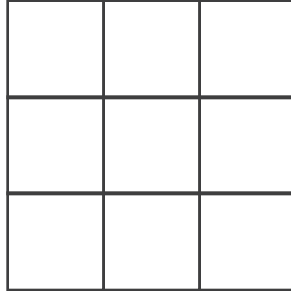
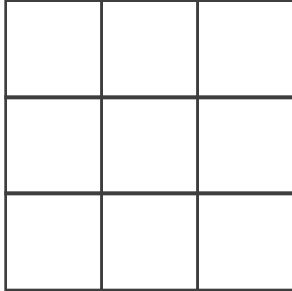
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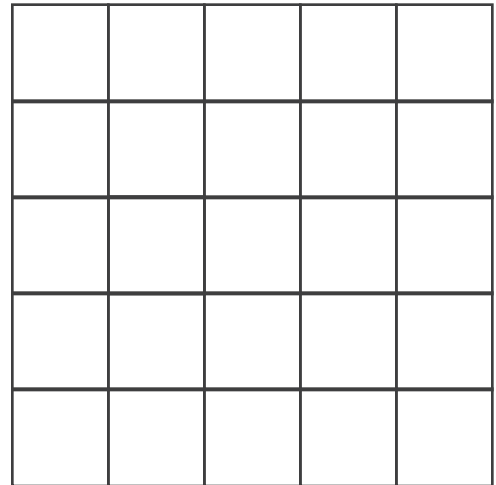
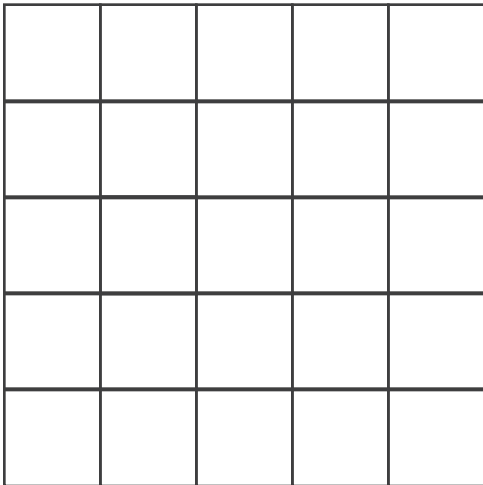
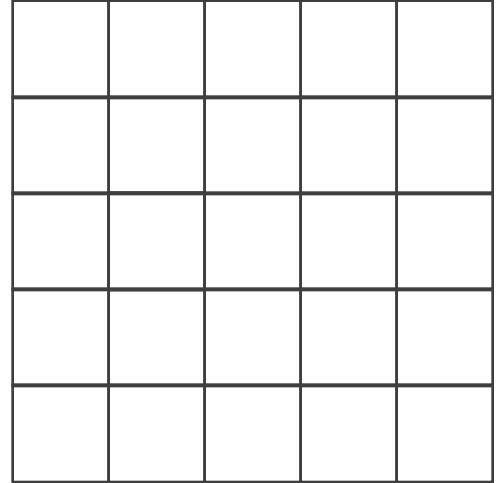
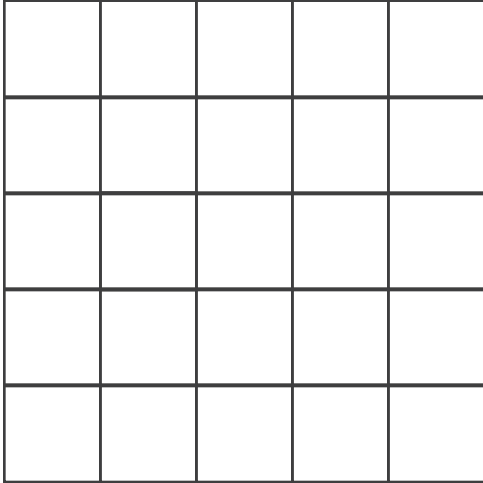


Small Pixel Grids



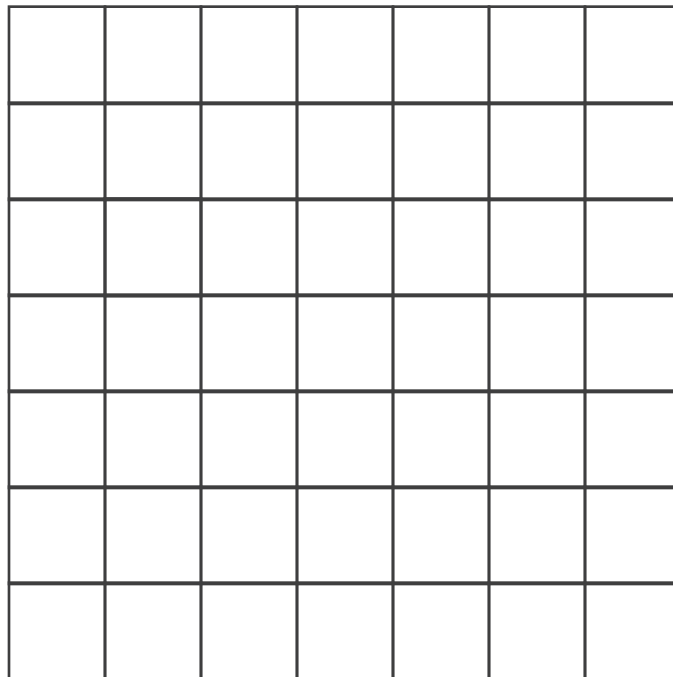
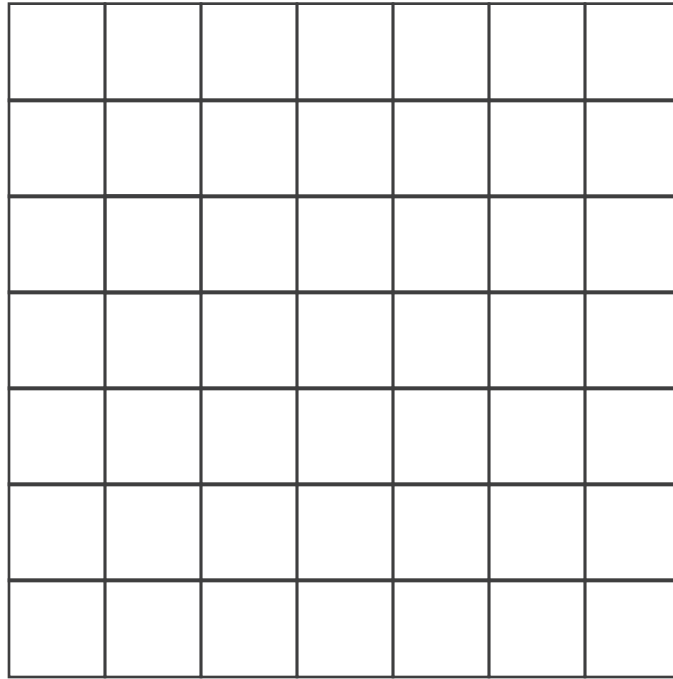


Medium Pixel Grids



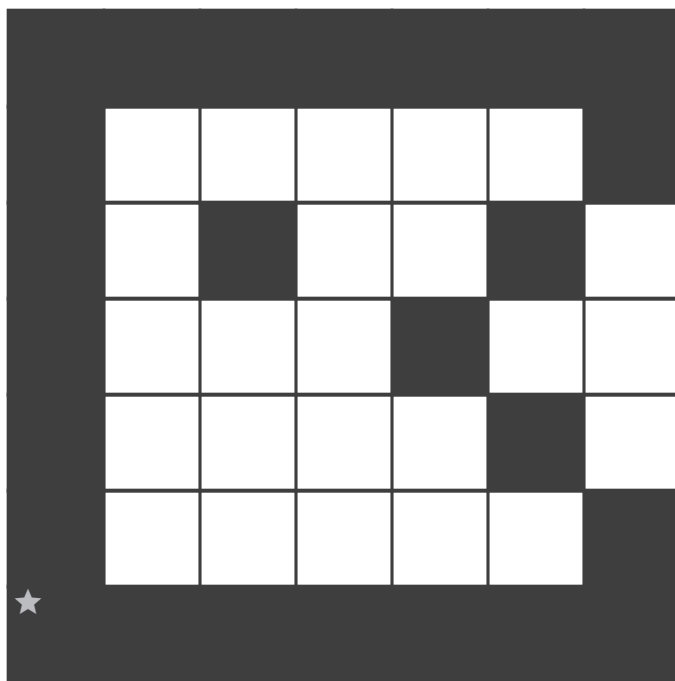
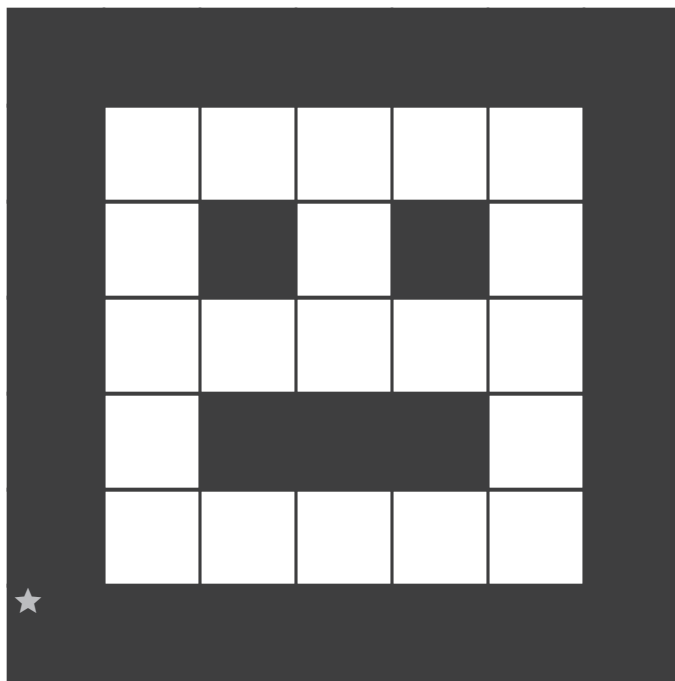


Large Pixel Grid





Challenge Problems - 1





Challenge Problems - 2

