Instructions

Use the code cards to navigate your figure around the board collecting all of the coins along the way. The description of each code card is as follows:

↑ 1	This card moves your figure one space forward.
↻ 90°	This card rotates your figure 90 degrees clockwise
↺ 90°	This card rotates your figure 90 degrees counter-clockwise
Do:	This card is to be used in conjunction with other commands and with the Until card. Whatever card immediately follows this card will be repeated until the condition at the following Until card is met.
Until:	Used in conjunction with the condition cards and with the Do card. This card sets the condition for ending the repition of the card between it and the Do card prior to it.

Do:	↑ 1	Until:	Column A

This sequence of code it the proper way of using a Do and an Until Card. In this case the forward 1 card will be repeated until the figure reaches column A. If the figure never reaches column A this will loop indefinitely.

{ and }	This card is to be used in conjunction with the Do and the If cards. Its primary purpose is to help organize sets of actions. For example if you wanted a Do card to perform more then one Action (such as having the figure move forward and then turn) you would include these brackets around the sequence you wanted performed.

Do:	{	↑ 1	↻ 90°	}	Until:	On $

This Sequence of Code would cause the figure to move forward then turn repeatedly until it landed on a coin.

true↗ IF: false↘	A branching card which will test a condition and then, if the condition is true will execute a command (or set of commands between brackets) and a different command if false. When finished it will return to the original sequence of events.

	{	↻ 90°	↻ 90°	↑ 1	}
true↗ IF: false↘	Blocked ↑	↑ 1			
	↑ 1				

This Sequence of Code would cause the figure to check and see if there is an obstacle in front of it. If there is the figure would turn twice then move forward 1. If there is not an obstacle in front of the figure the figure will simply move forward 1. Either way, after the has completed the true or false commands it will move forward 1.

AND	This card allows for multiple conditions to be tested by a Until or an If. For example, you can check if the figure is on a specific row and a specific column or you could check to see if the figure is in a specific row and if it is on a coin.

OR	This card allows for multiple conditions to be tested by a Until or an If. For example, you can check if the figure is on a specific row or a specific column or you could check to see if the figure is in a specific row or if it is on a coin.
Column	This is a condition card to be used in conjunction with If and Until. This indicates which column the command is checking for.
Row	This is a condition card to be used in conjunction with If and Until. This indicates which row the command is checking for.
Blocked ↑	This is a condition card to be used in conjunction with If and Until. This indicates whether or not the figure has an obstacle directly in front of it.
On $	This is a condition card to be used in conjunction with If and Until. This indicates whether or not the figure just landed on a coin.

Challenge 1 – Moving Forward

	A	B	C	D	E	F	G	H
1	▓		▓		▓		▓	
2		▓		▓		▓		▓
3	▓		▓		▓		▓	
4		▓		$		▓		▓
5	▓		▓		▓		▓	
6		▓		start		▓		▓
7	▓		▓		▓		▓	
8		▓		▓		▓		▓

Challenge 2 – About Face

	A	B	C	D	E	F	G	H
1								
2								
3								
4				$		$		
5								
6				start				
7								
8								

Challenge 3 – Just out of Reach

	A	B	C	D	E	F	G	H
1				$				
2								
3								
4								
5								
6								
7								
8				start				

Challenge 4 – Around the Board

	A	B	C	D	E	F	G	H
1	$							$
2								
3								
4								
5								
6								
7								
8	start						$	

Challenge 5 – Stairs

	A	B	C	D	E	F	G	H
1	$							
2		$						
3			$					
4				$				
5					$			
6						$		
7							$	
8								start

Challenge 1 – The Spiral

	A	B	C	D	E	F	G	H
1	$							$
2		$					$	
3			$			$		
4								
5						start		
6			$				$	
7		$						$
8								

Challenge 1 – Moving Forward

	A	B	C	D	E	F	G	H
1								
2								
3								
4				$				
5								
6				**start**				
7								
8								

Challenge 7 – The Extra Coin

	A	B	C	D	E	F	G	H
1								
2					$			
3	$							
4					$			
5	$							
6					$			
7								
8					start			
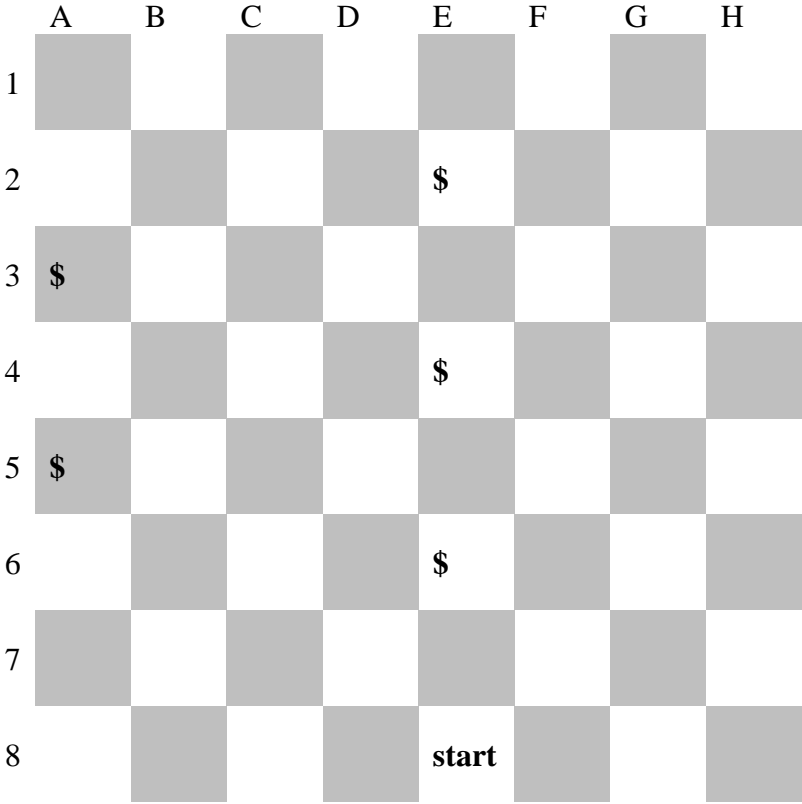
Challenge 8 – Around the Wall

	A	B	C	D	E	F	G	H
1					$			
2					wall			
3								
4	wall	wall	wall	wall		wall	wall	wall
5								
6					wall			
7								
8					start			

Challenge 9 – Pockets

	A	B	C	D	E	F	G	H
1	**wall**							
2	**$**							
3	**wall**							
4	**$**							
5	**wall**							
6	**$**							
7	**wall**							
8	**$**	**start**						