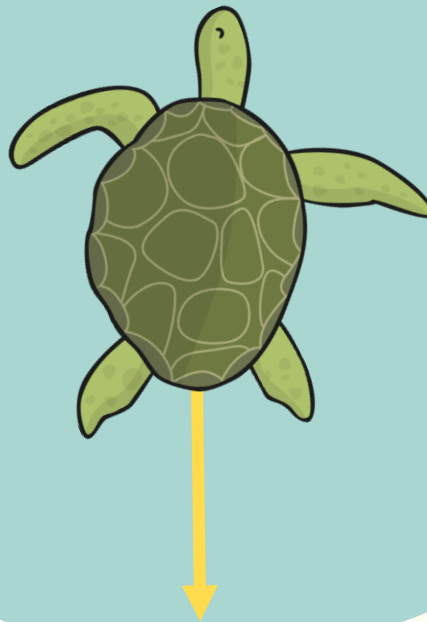




Computing

Programming Turtle Logo and Scratch

Backwards



Aim

- I can create and debug an algorithm using the move, rotate and repeat commands.

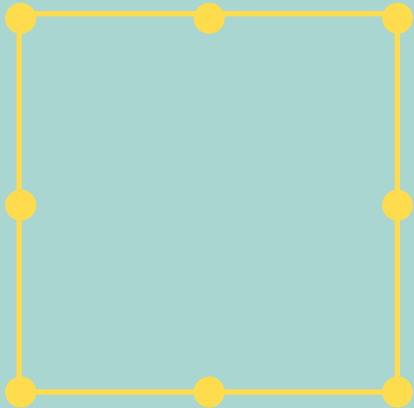
Success Criteria

- I can write commands in the correct order.
- I can write a variable value where required.
- I can correct any mistakes.
- I can use the commands `fd`, `bk`, `lt`, `rt` to move or rotate the turtle.
- I can use `cs` to clear the screen.
- I can use the repeat command.

What Can You Remember?



Can you use the basic Turtle Logo commands to write down the algorithm for drawing a square, rectangle or other rectilinear shape?



Can you remember the commands for moving forward, or rotating right and left?



Shapes With Turtle Logo



Write an algorithm for:

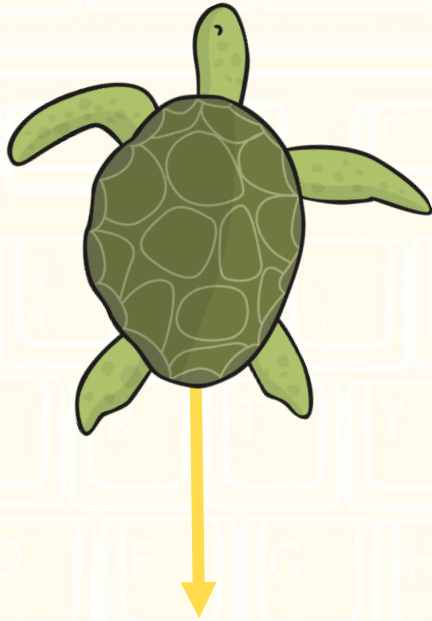
- a square with sides of 120
- a rectangle of sides 50 and 80
- an L shape



Can You Go Backwards?



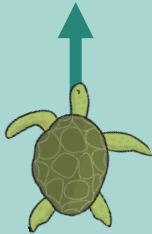
Can you give the turtle a command to go backwards?



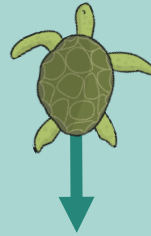
backward 100
Or
bk 100
(or any other number)

Turtle Logo Commands

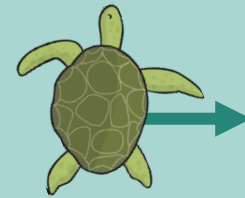
fd 100
move forward



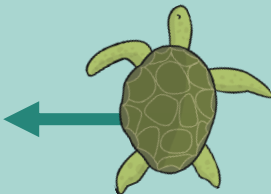
bk 100
move backward



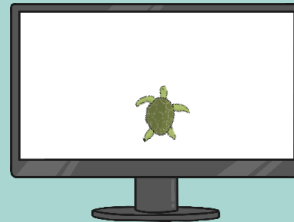
rt 90
turn right



lt 90
turn left



cs
clear screen



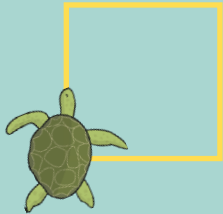
repeat

fd 4 rt 90

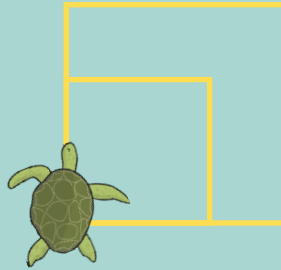
fd 4 rt 90

Repeating Squares

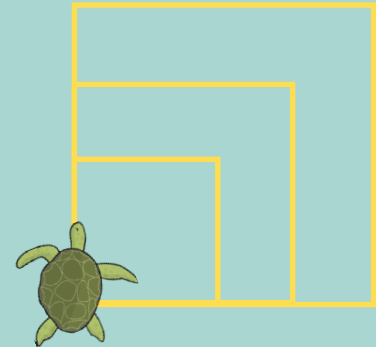
```
repeat 4[fd 100 rt 90]
```



```
repeat 4[fd 150 rt 90]
```



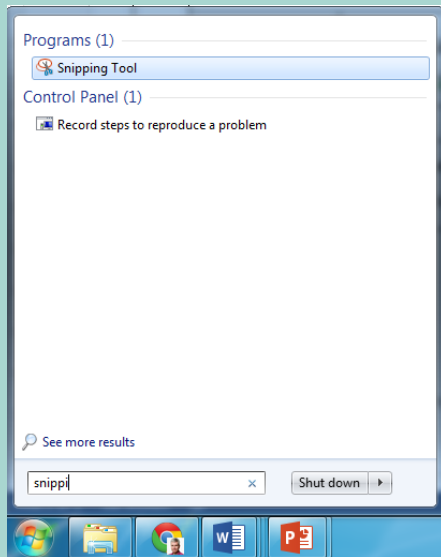
```
repeat 4[fd 200 rt 90]
```



Snipping Tool

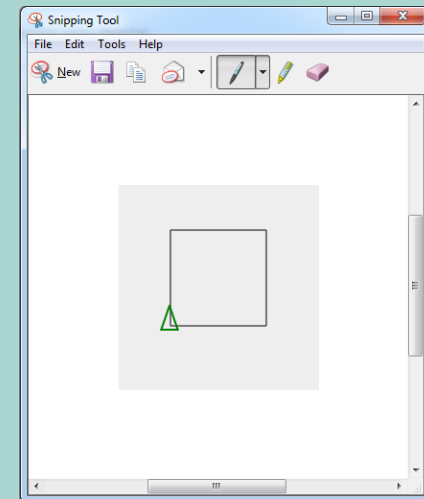
Use the snipping tool to save your pictures and patterns.

1. Go to the start menu



2. Type snip into the search bar and select the snipping tool.

3. Select the area to snip (or click new to do so).

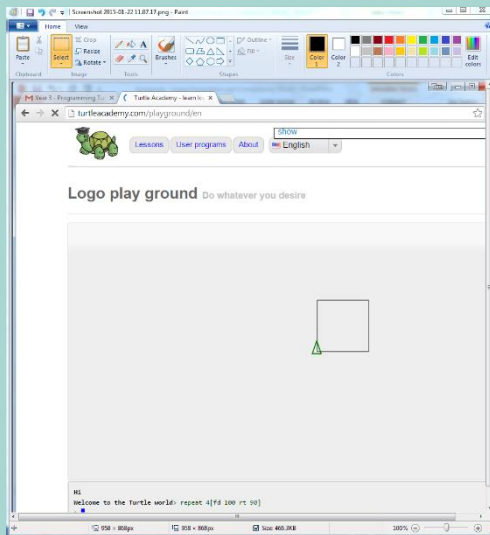


4. Save your snip.

Screenshot

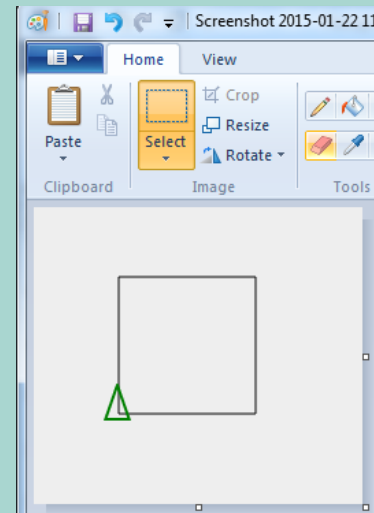
Alternatively you can take a screenshot to save your pictures and patterns.

1. Press “Print Screen” to copy the screen.



2. Paste the screenshot into Paint.

3. Select the picture with the select tool.

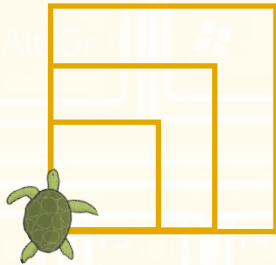


4. Crop and save the picture.

Growing Square and Rectangles

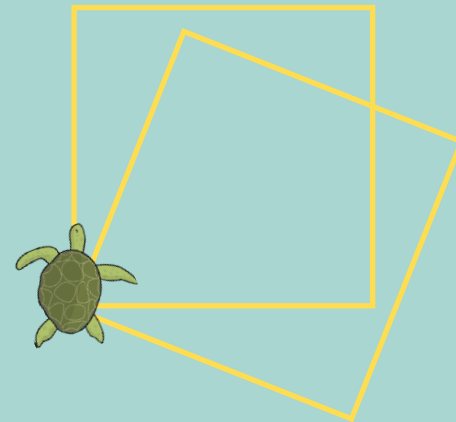


Draw some growing square and rectangles using the repeat command.



Can you use the backwards command to draw the squares?

Can you create an algorithm for this?



Share

Share your pictures, patterns and algorithms.



What difficulties did you have?

How did you overcome them?

What has your partner done well?

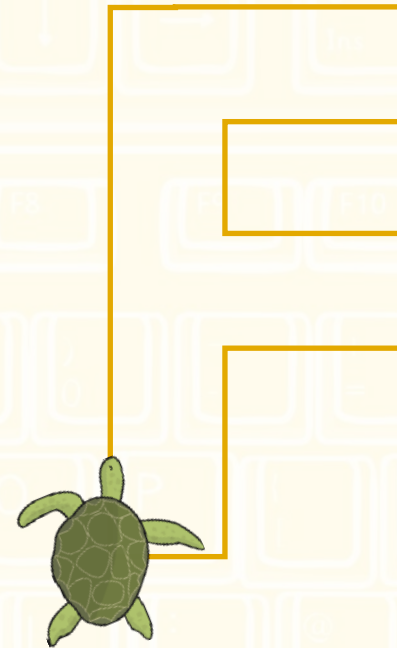


Which Letter?



Which letter is drawn by this algorithm?

```
fd 100 rt 90 fd 50 rt 90
fd 20 rt 90 fd 30 lt 90
fd 20 lt 90 fd 20 rt 90
fd 20 rt 90 fd 20 lt 90
fd 40 rt 90 fd 20 rt 90
```



How would you draw 2 squares that are not touching?

Aim



- I can create and debug an algorithm using the move, rotate and repeat commands.

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- I can use `cs` to clear the screen.
- I can use the repeat command.

