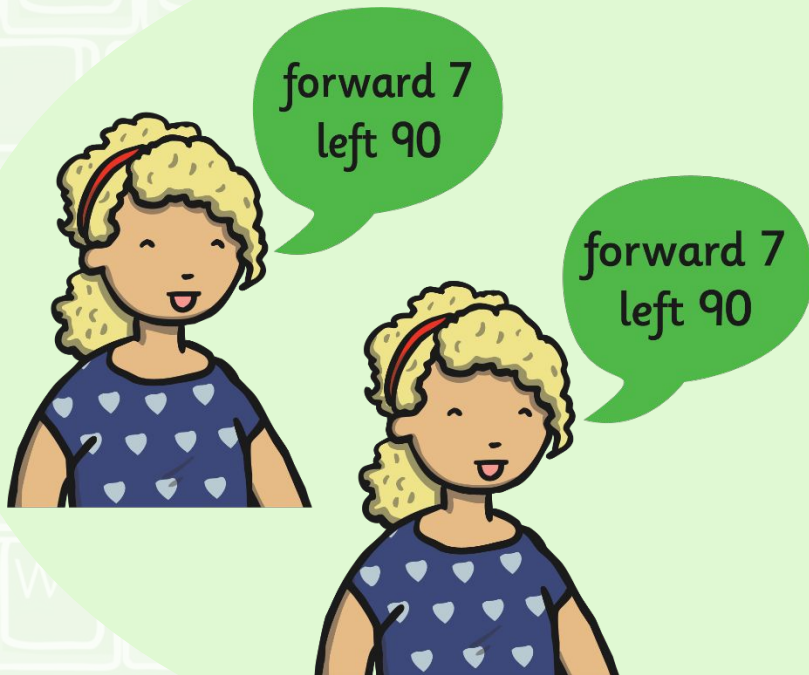


Repeat



This half term's unit in Computing is **Programming** where the children will learn to create and debug algorithms - following on from their earlier learning in Year 1 where they learnt to program Bee-Bots. The children will use the basic commands in Logo to move and draw using the turtle on screen, and then further develop algorithms using the "repeat" command. These skills will then be developed by teaching children to create algorithms in Scratch using a selection of blocks. This PowerPoint gives you information and instructions to create an algorithm using the repeat command. This can be done on JiT and you will find the children's usernames and passwords to access JiT in the back of their reading records.

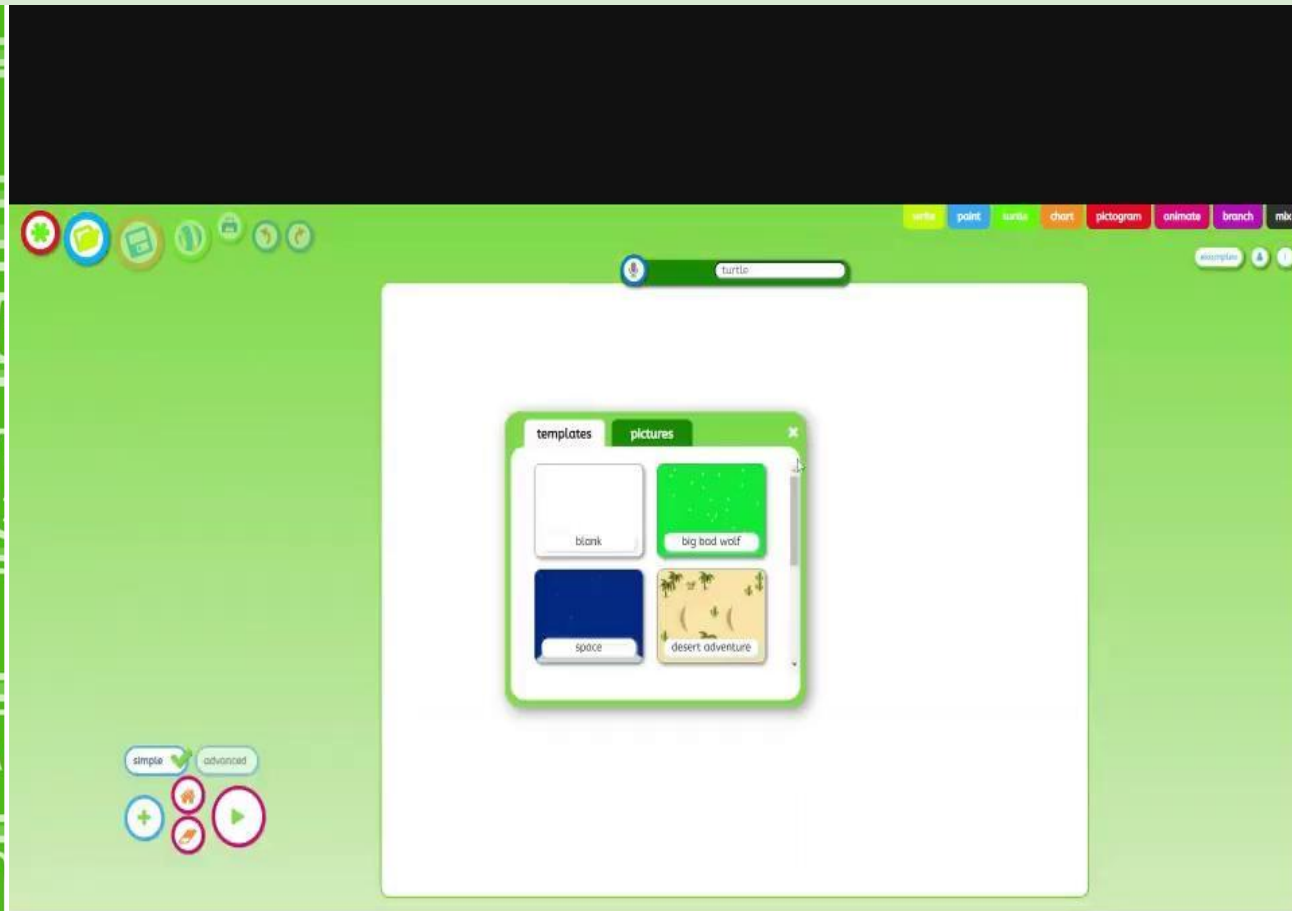
Aim

- I can create an algorithm using the repeat command.

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, lt, rt to move or rotate the turtle.
- I can use repeat.

You may want to watch this video again to recap all of the skills we learnt last week. You may have just tried the 'simple' option and now feel ready to have a practise using the 'advanced' option or maybe you're ready to move on to the 'j2code' platform instead. If you feel confident with these skills already please feel free to have a look at the next 4 slides for a quick recap of previous skills that you learnt last week before we move on to our new learning of using the 'repeat'.



Miss Holmes

Squares and Rectangles

Draw some squares and rectangles using the commands:



forward
<steps>.

right 90 or
left 90.



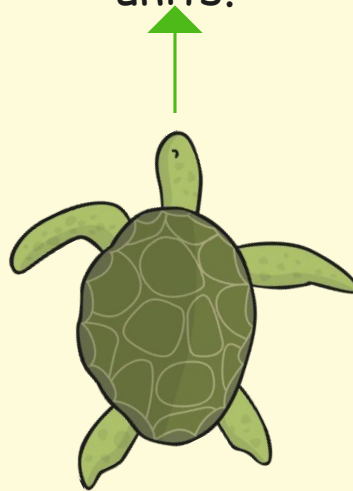
Turtle Logo Commands

Remember the commands needed for these tasks:

Moving Forward



Forward 100
or
fd 100
will move the
turtle forward 100
units.



Change the
number (variable)
to move the turtle a
different distance.

fd 4

rt 90



fd 4?
Or fd 5?

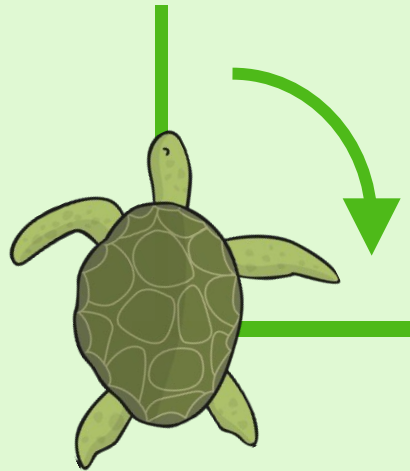
Turtle Logo Commands

Remember the commands needed for these tasks:

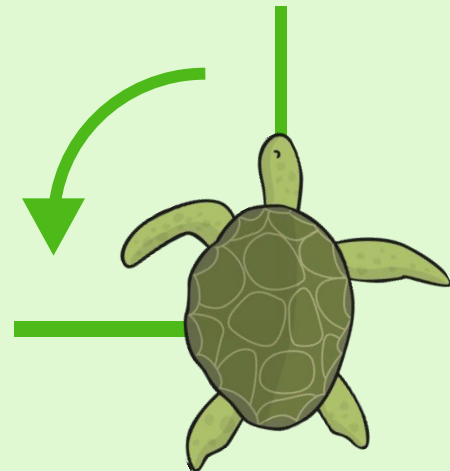
**Turning
left and right**



Right 90 or rt 90
will turn the turtle
to the right
(quarter turn or
 90°).



left 90 or lt 90
will turn the turtle
to the left
(quarter turn or
 90°).

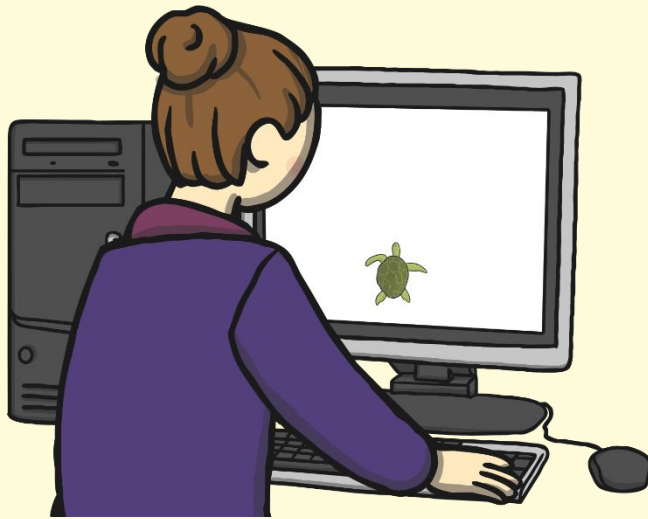


Turtle Logo Commands

Remember the commands needed for these tasks:

Clearing the Screen

'Clearscreen' or 'cs' will clear the screen and return the turtle to the starting position.

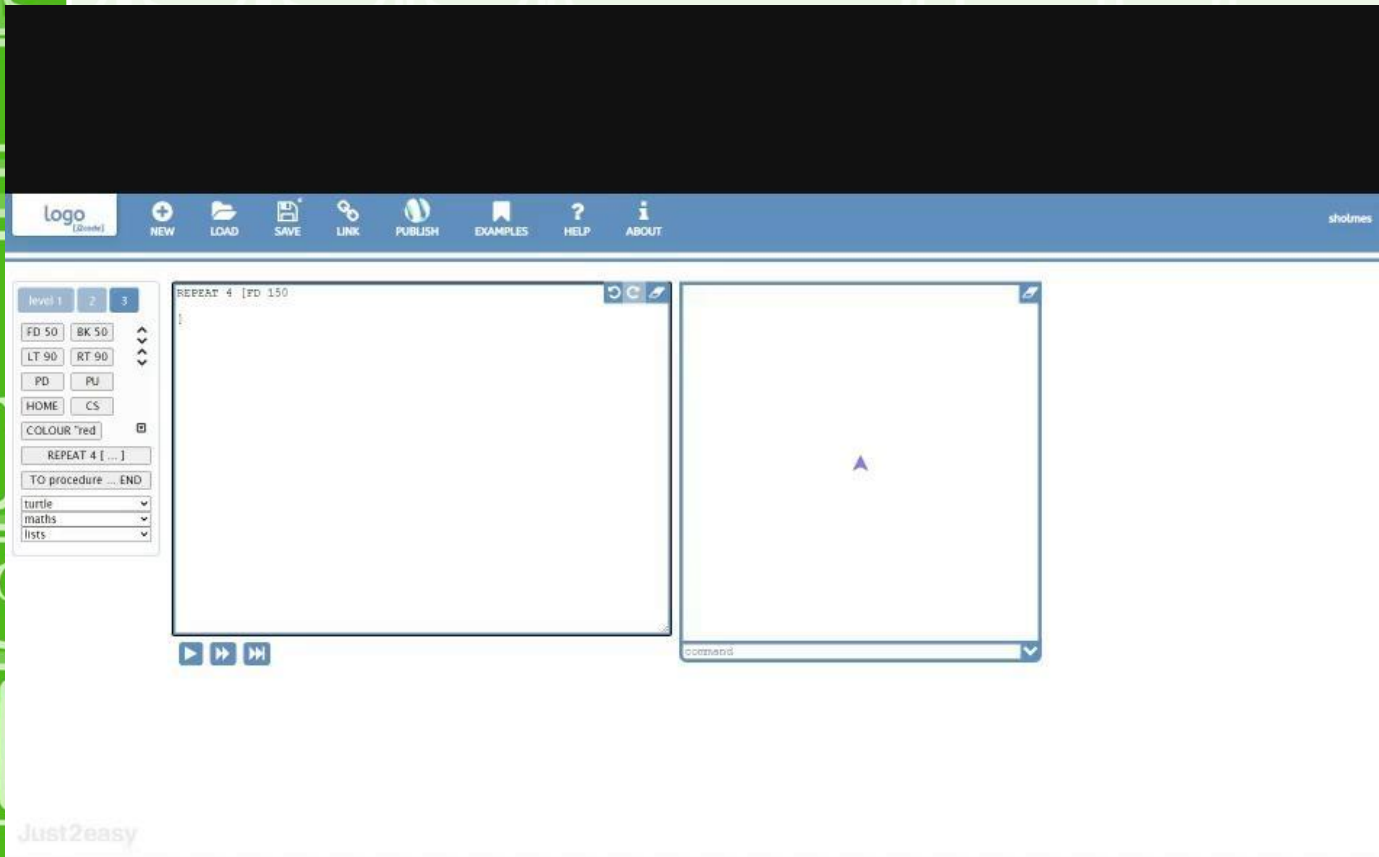


Using the Up Arrow

You can use the up arrow to scroll back through previous commands. This can save time by not having to type out commands again.



Once you have recapped all of the previous skills we can move on to using the repeat command! I have created a little video below to hopefully help you navigate your way around j2code! Using the repeat command can you draw squares and rectangles of different sizes? If this is a little tricky, don't worry! Instead, you can continue practising with the simple/advanced options on JiT.



Miss Holmes

The Repeat Command

Here are suggested instructions for a square of side 100.

Basic algorithm

fd 100

rt 90

fd 100

rt 90

fd 100

rt 90

fd 100

rt 90

Combining some commands

fd 100 rt 90

fd 100 rt 90

fd 100 rt 90

fd 100 rt 90

Using the repeat command

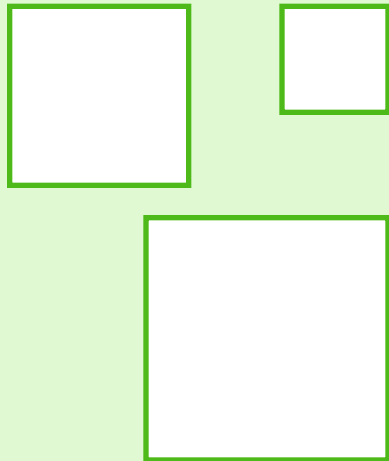
repeat 4 [fd 100 rt 90]

Different Shapes

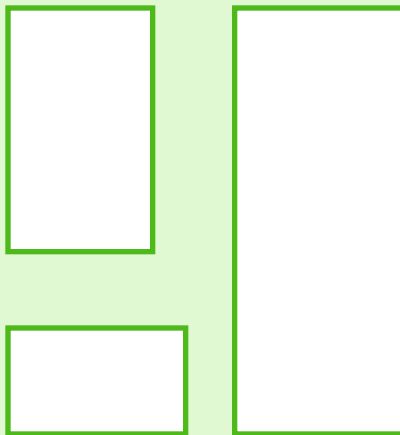


Using a Turtle Logo programme on a computer or tablet, draw some different squares and rectangles.

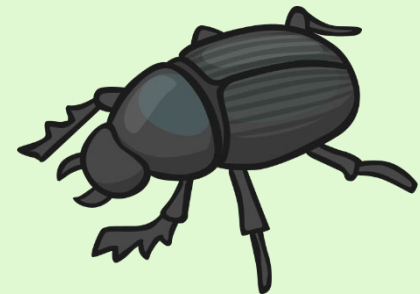
Can you write algorithms to draw squares of different sizes?



Can you write algorithms to draw rectangles of different sizes?



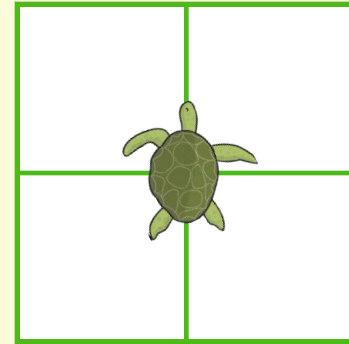
What happens if your algorithm has a mistake?



Can You...?

Can you write an algorithm for this shape?

What other solutions can you think of?



repeat 4 [fd 100 rt 90]

= draw large square.

repeat 4 [fd 50 rt 90]

= draw square half the length.

fd 50 rt 90 fd 50 lt 90

= move to the centre of large square.

repeat 4 [fd 50 rt 90]

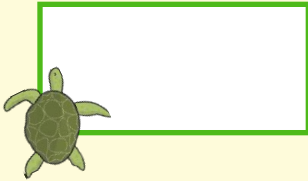
= draw small square.

What Will This Algorithm Draw

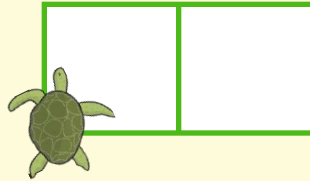


```
repeat 2[fd 50 rt 90 fd 100 rt 90]  
repeat 4[fd 50 rt 90 fd 50 rt 90]
```

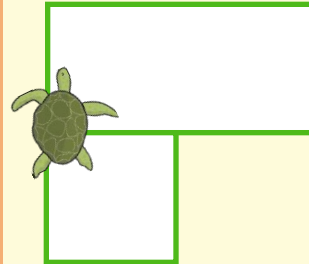
A



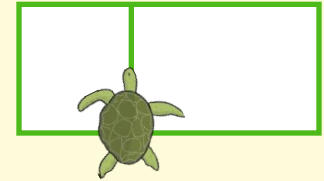
B

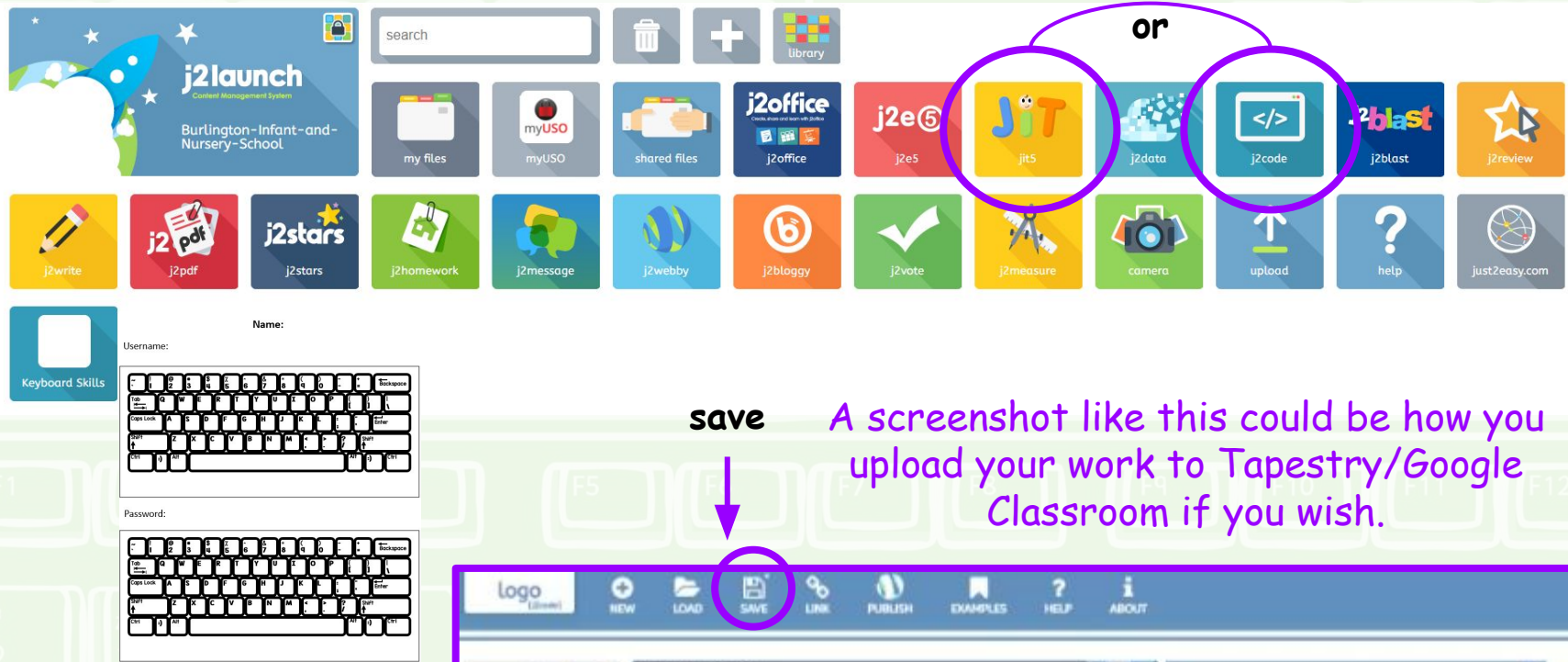


C



D

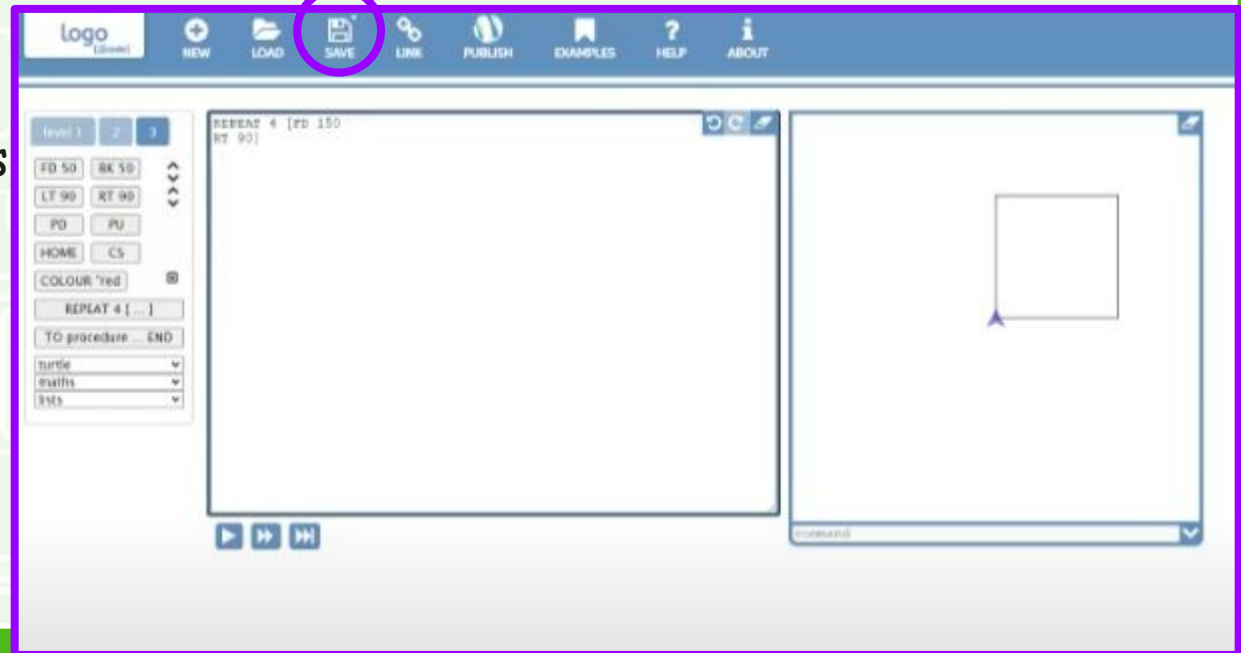




save



A screenshot like this could be how you upload your work to Tapestry/Google Classroom if you wish.



You will find children's usernames and passwords to access JiT stuck in the back of their reading records. Please see the next slide for instructions.

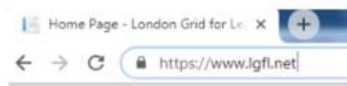
Here are some prompts the children follow at school:

1. Turn your computer and screen on. 

2. Log on

3. Click on the Internet Icon - Chrome 

4. www.lgfl.net



5. Click on 'Login'



6. Type in your Username and Password and Enter

7. Type 'jit' in the search bar.



8. Click on the Icon for JiT



JiT - j2e Infant Tools
The EYF5 tools from the makers of the j2e Tool Suite

9. Launch Resource

LAUNCH RESOURCE

www.j2launch.lgfl.net →

10. Normal USO Login



Normal USO Login

11. Click on the JiT5 Icon



Aim



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Success Criteria

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