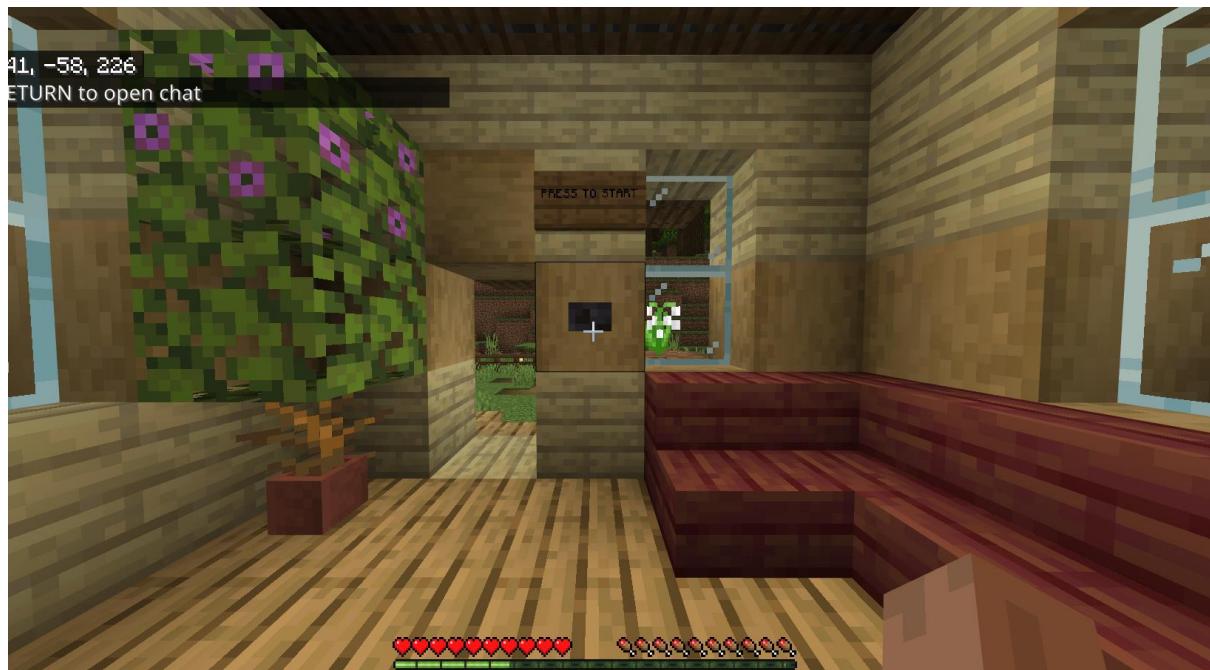


## Walkthrough

### 0. Introduction 0

Press the start button to begin.



### 1. Introduction 1

Speak to Headmaster Edgar and select Yes. The Not Yet option allows exploration of the house, you are able to speak to him again to start.



## 2. Introduction 2

Speak to Edgar again in the tunnel and select Okay.



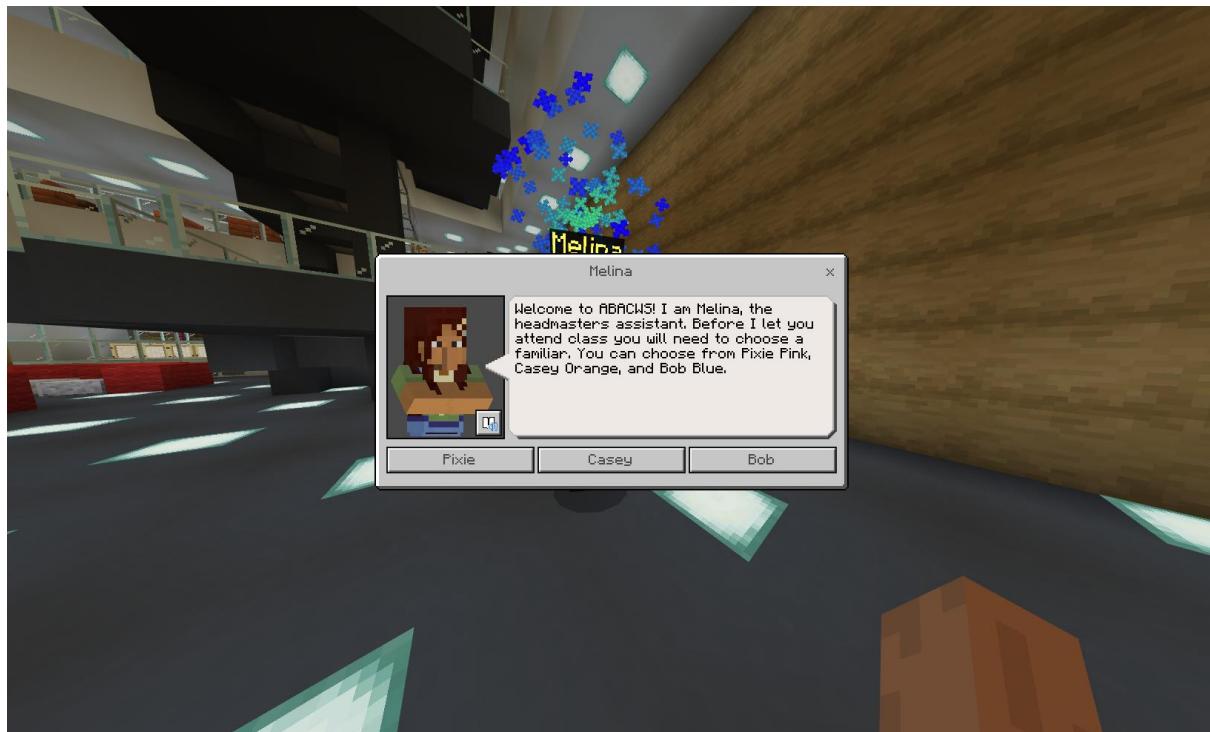
## 3. Introduction 3

Make your way into the building.



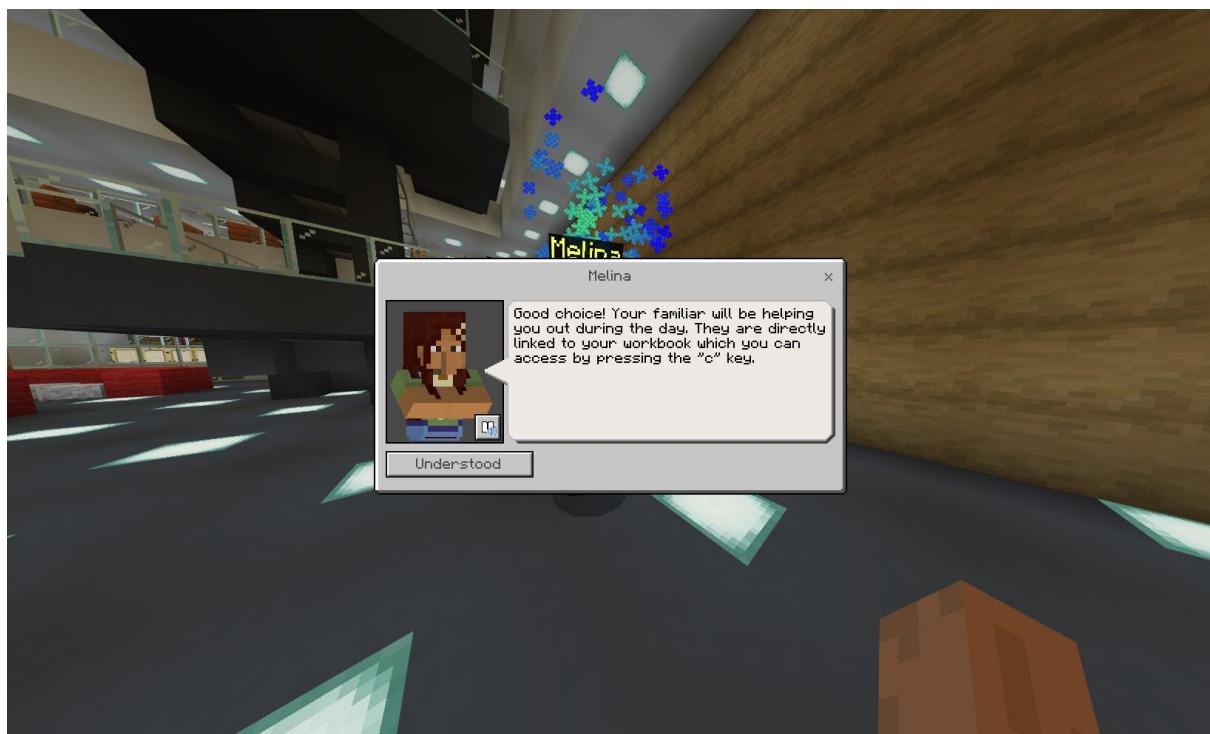
#### *4. Introduction 4*

Talk to Melina inside. Either of the options can be selected as they only change the colour of the familiar.



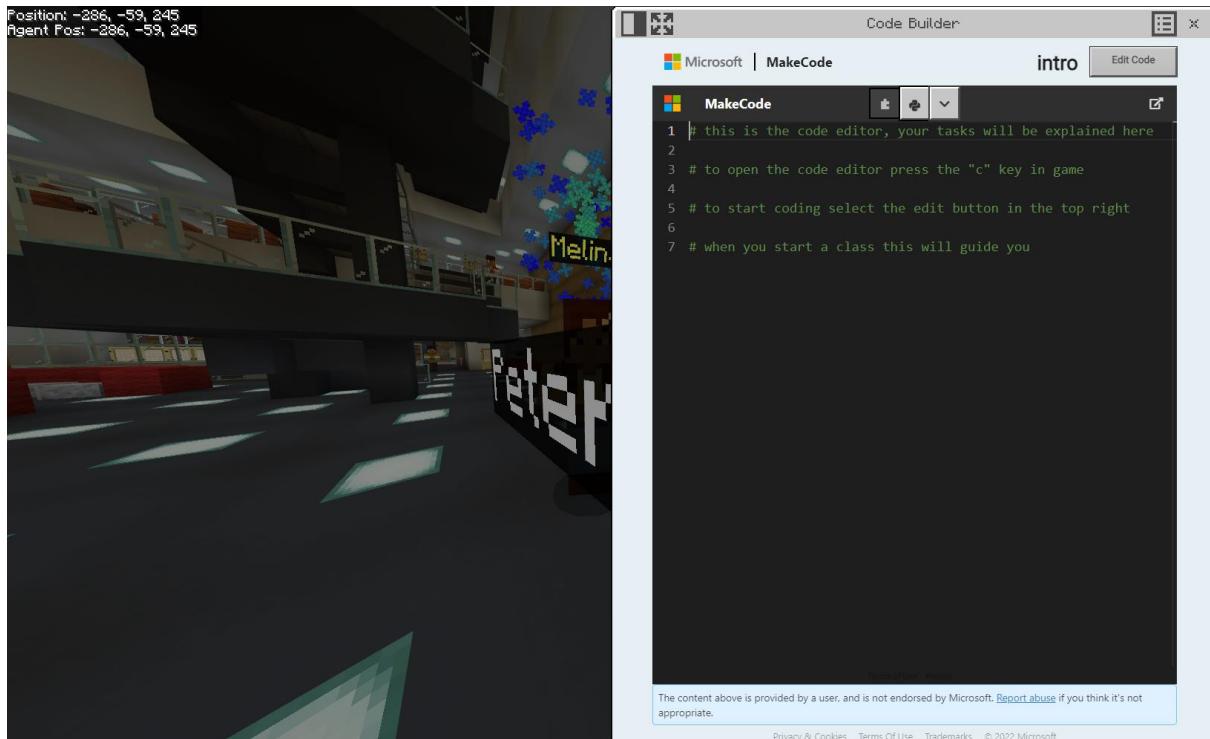
#### *5. Introduction 5*

Select understood.



## 6. Introduction 6

The code editor will open here with some brief information. You can select the x in the top right corner to close.



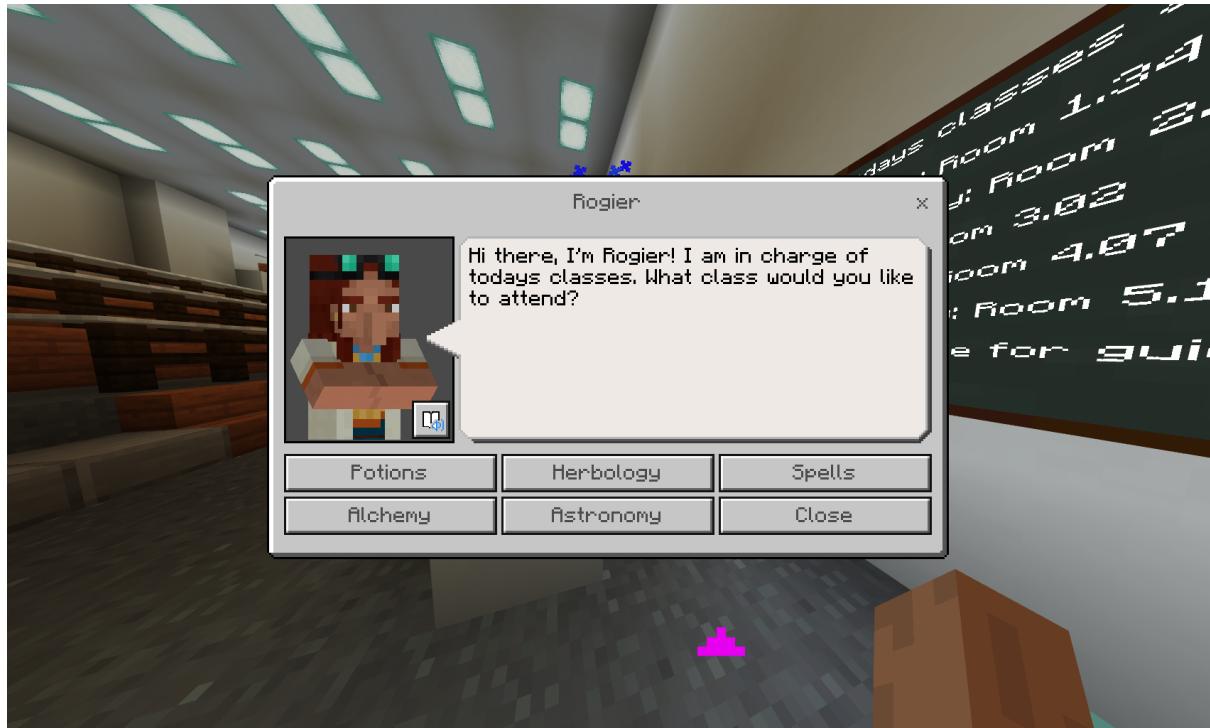
## 7. Introduction 7

Speak with Melina again and select Yes then Okay. The dialogue will then end. If No is selected, speak to Melina again. There should be markers on the floor to guide you to your destination.



## 8. Introduction 8

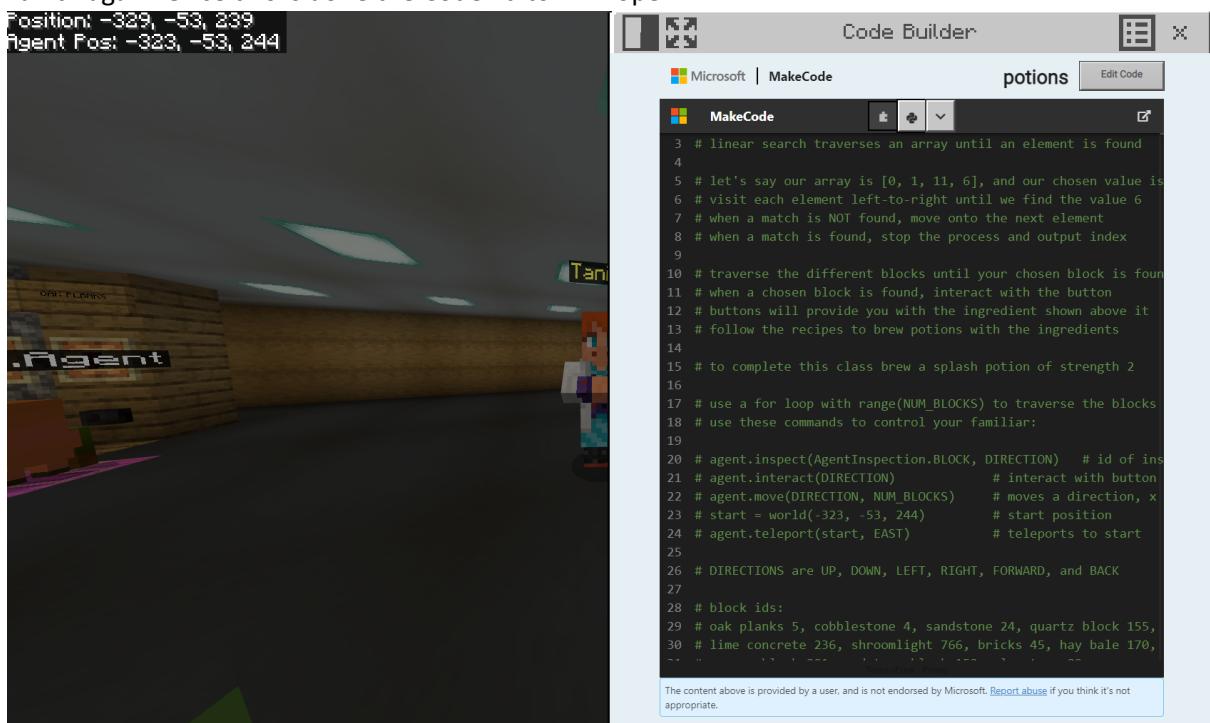
Speak to Rogier and select the class you would like to start. Then select Understood. This places markers to the selected class. You can always talk to Rogier again to change your destination.



## 9. Potions 0

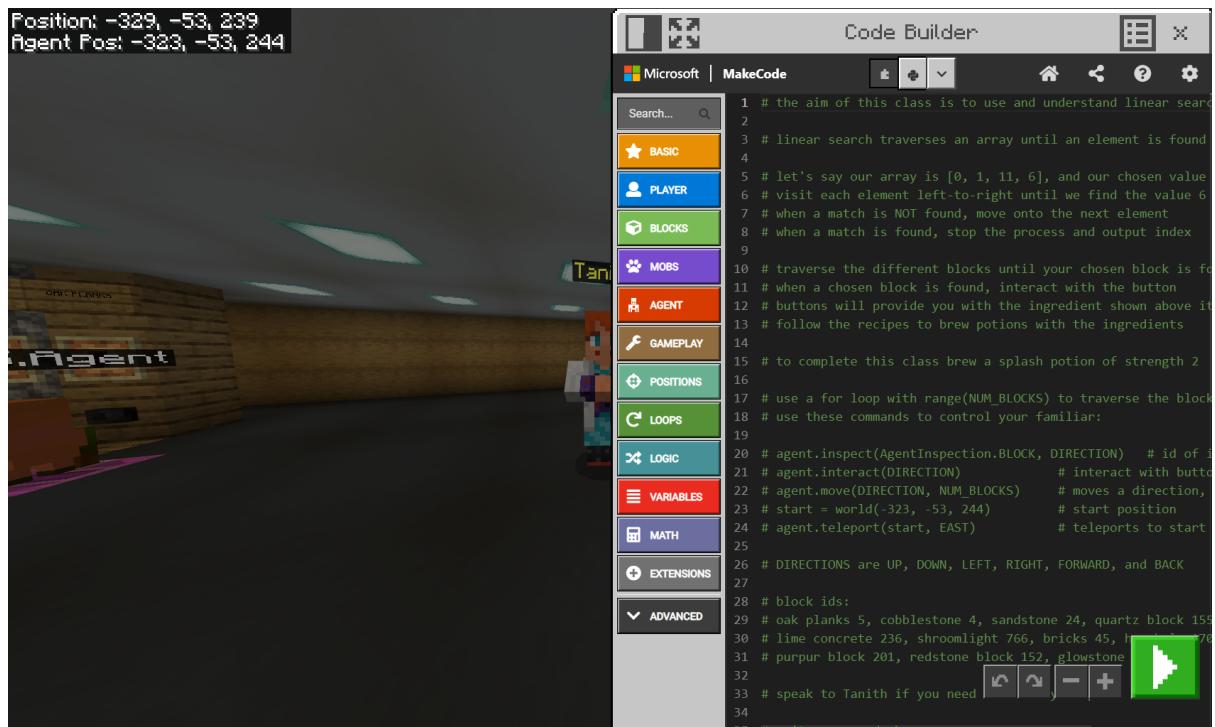
Speak to Tanith in room 1.34/1.39. Select Next, Next, then Yes to start. If No is selected, speak to Tanith again. Once this is done the Code Editor will open.

Position: -329, -53, 239  
Agent Pos: -323, -53, 244



## 10. Potions 1

To edit the code select Edit Code in the top right corner. The learners can now start writing code. Refer to the answer workbook for how the code should look.



## 11. Potions 2

Empty potion bottles are available in the crates near the brewing stands.



### *12. Potions 3*

Take an empty bottle and right click the cauldron with it to fill it up.



### *13. Potions 4*

To use the brewing stands right click them.



### *15. Potions 5*

Brewing stands require blaze powder to be put into the top right slot. The bar should be yellow when full.



### *16. Potions 6*

To create an awkward potion, place the water bottle in one of the 3 slots at the bottom and the nether wart in the top.



### *17. Potions 7*

Place one of the ingredients shown on the recipes board in the top with the awkward potion in one of the 3 bottom slots. To create the strength potion place blaze powder in the top slot.



### *18. Potions 8*

To make this a potion of strength 2, place glowstone in the top slot with the potion of strength in one of the bottom 3 slots.



### *19. Potions 9*

To make this a splash potion add gunpowder to the top slot with the potion of strength 2 in one of the bottom 3 slots.



### *20. Potions 10*

This is the requirement to complete the class, once you have the item in your inventory Tanith will have particles above her head.



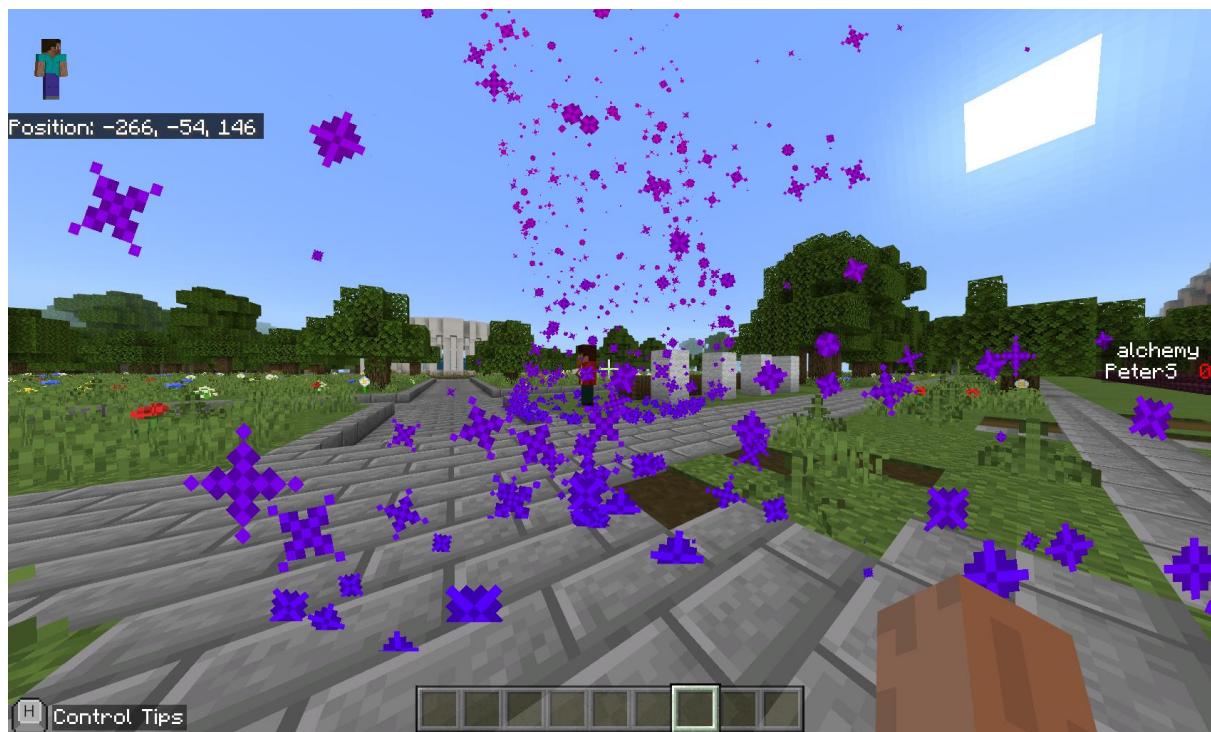
*21. Potions 11*

Speak to Tanith and select Complete.



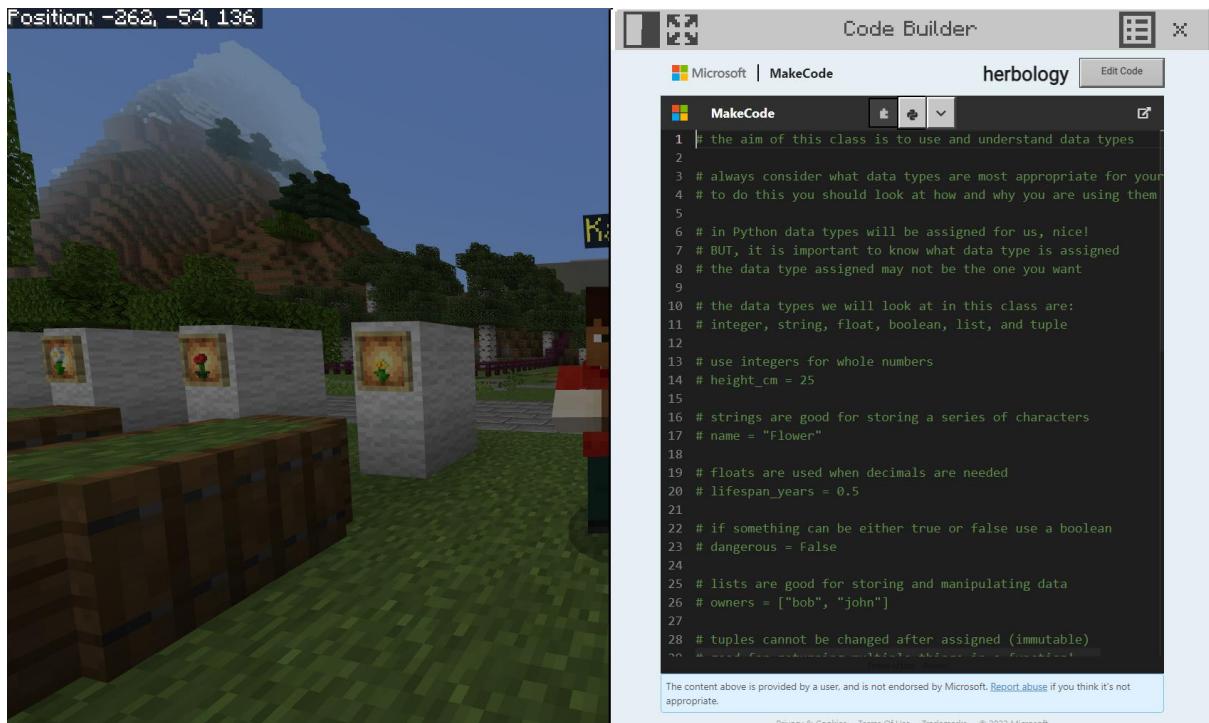
*22. Herbology 0*

Speak to Kale in room 2.53. Select Next then I'm Ready to start. If Not Yet is selected speak to Kale again. You should be teleported to Alexandra Gardens.



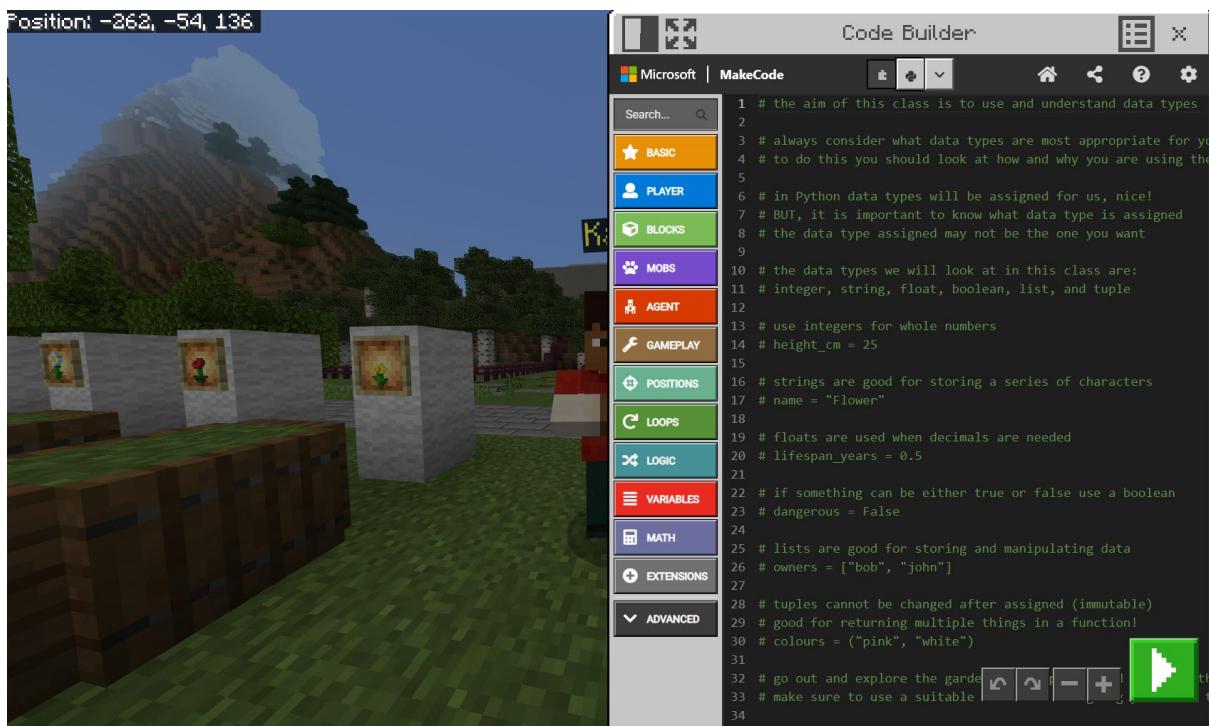
### 23. Herbology 1

Speak to Kale again and select Next then Yes. If No is selected speak to Kale again. The code editor will open with a tutorial.



### 24. Herbology 2

To edit the code select Edit Code in the top right corner. The learners can now start writing code. Refer to the answer workbook for how the code should look.



## 26. Herbology 4

If players would like to know more about a certain flower speak to Kale and select one of the options.



## 25. Herbology 3

Once learners have found various plants and created variables with different data types you can complete the class. The flowers shown in the item frames need to be placed on the raised patch of grass.



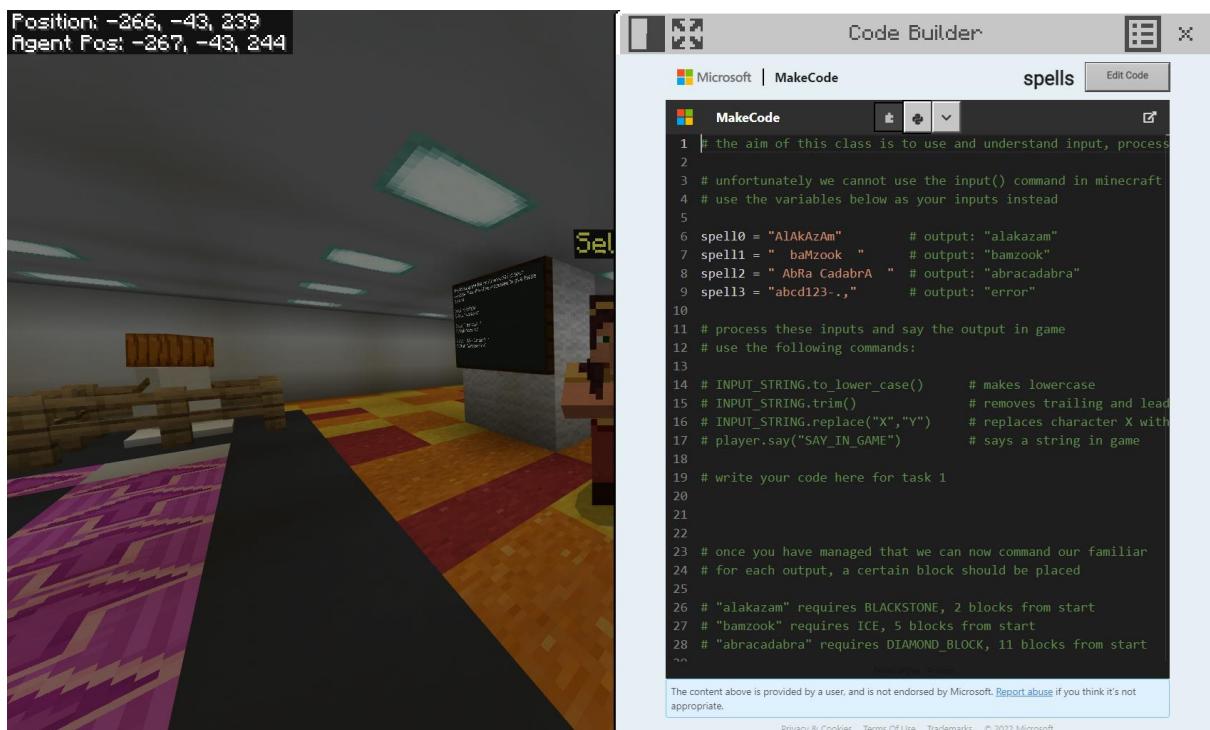
## 26. Herbology 4

Once done the flowers will disappear and you can speak to Kale again. Select Complete to finish the class.



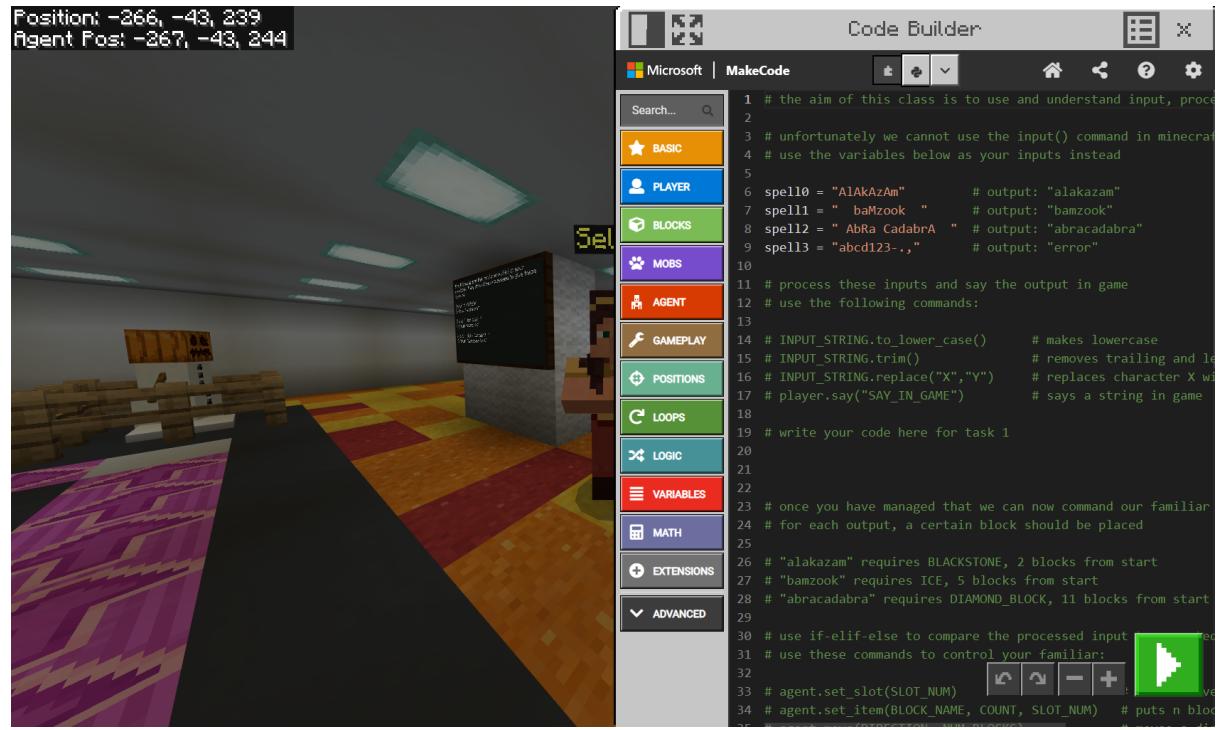
## 27. Spells 0

Speak to Sellen in room 3.02. Select Next then I'm Ready to start. If Not Yet is selected speak to Sellen again. Once this is done the Code Editor will open.



## 28. Spells 1

To edit the code select Edit Code in the top right corner. The learners can now start writing code. Refer to the answer workbook for how the code should look.



## 29. Spells 2

To complete the class the first 3 spells in the code builder need to be processed and output the correct commands. Spell0 should place a Blackstone block here if the output matches “alakazam”.



### 30. Spells 3

Spell1 should place an Ice block here if the output matches “bamzook”.



### 31. Spells 4

Spell 2 should place a Diamond block here if the output matches “abracadabra”.



### 32. Spells 5

Once all output commands have run correctly speak to Sellen and select Complete.



### 33. Alchemy 0

Speak to Rennala in room 4.07. Select Next, Next, Next then I'm Ready to start. If Not Yet is selected speak to Sellen again. Once this is done the Code Editor will open.

A screenshot from a video game. On the left, a character is standing in a room with a dark floor and walls. On the right, a Microsoft MakeCode Code Builder window is open. The window title is "Code Builder" and it shows the Microsoft MakeCode logo. The tab bar has "Microsoft | MakeCode" and "alchemy" selected. The code editor contains the following text:

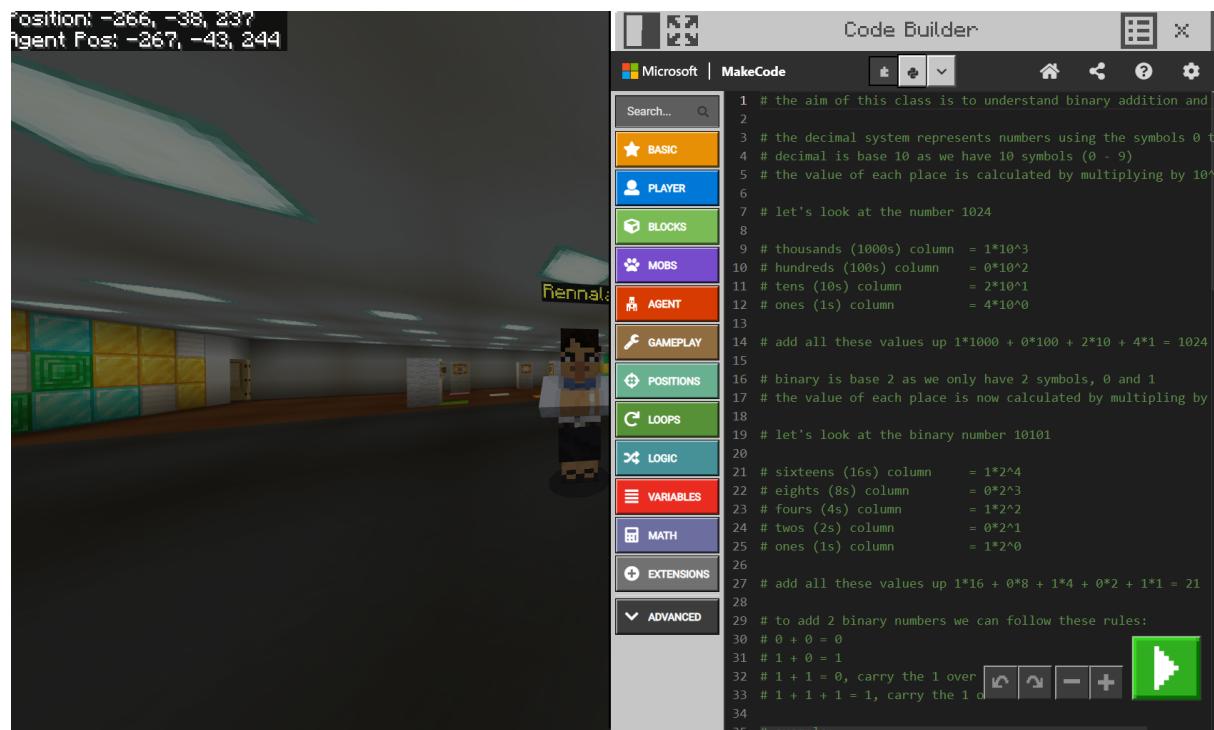
```
14 # add all these values up 1*1000 + 0*100 + 2*10 + 4*1 = 1024
15
16 # binary is base 2 as we only have 2 symbols, 0 and 1
17 # the value of each place is now calculated by multiplying by 2^x
18
19 # let's look at the binary number 10101
20
21 # sixteens (16s) column      = 1*2^4
22 # eights (8s) column        = 0*2^3
23 # fours (4s) column         = 1*2^2
24 # twos (2s) column          = 0*2^1
25 # ones (1s) column          = 1*2^0
26
27 # add all these values up 1*16 + 0*8 + 1*4 + 0*2 + 1*1 = 21
28
29 # to add 2 binary numbers we can follow these rules:
30 # 0 + 0 = 0
31 # 1 + 0 = 1
32 # 1 + 1 = 0, carry the 1 over
33 # 1 + 1 + 1 = 1, carry the 1 over
34
35 # example:
36 # 0101 0011 +
37 # 0111 0110 =
38 # 1100 1001
39 # 111 11
40
41 # extra help here: https://www.bbc.co.uk/bitesize/guides/z26rcd
42
```

The content above is provided by a user, and is not endorsed by Microsoft. [Report abuse](#) if you think it's not appropriate.

Position: -264, -38, 236  
Agent Pos: -267, -43, 244

### 34. Alchemy 1

To edit the code select Edit Code in the top right corner. The learners can now start writing code. Refer to the answer workbook for how the answers should look.



### 35. Alchemy 2

You will be given white and black wool to place your answers. White wool represents a 0 and black wool represents a 1. There are 4 sections that need to be completed, red, yellow, pink, and green.



### 36. Alchemy 3

The red section should look like this. You will be given an iron block if correct.



### 37. Alchemy 4

The yellow section should look like this. You will be given glowstone if correct.



### 38. Alchemy 5

The pink section should look like this. You will be given cobblestone if correct.



### 39. Alchemy 6

The green section should look like this. You will be given an oak log if correct.



#### 40. Alchemy 7

Place all four blocks in the correctly labelled section. A gold block should appear in the center.



#### 41. Alchemy 8

You can now speak to Rennala and select Complete to finish the class.



## 42. Astronomy 0

Speak to Ranni in room 5.11. Select I'm Ready to start. If Not Yet is selected speak to Ranni again. You will be teleported to the rooftop. You can also access the rooftop via the stairs located next to the toilets.



## 43. Astronomy 1

Speak to Ranni again and select Okay to start. The code editor will open.

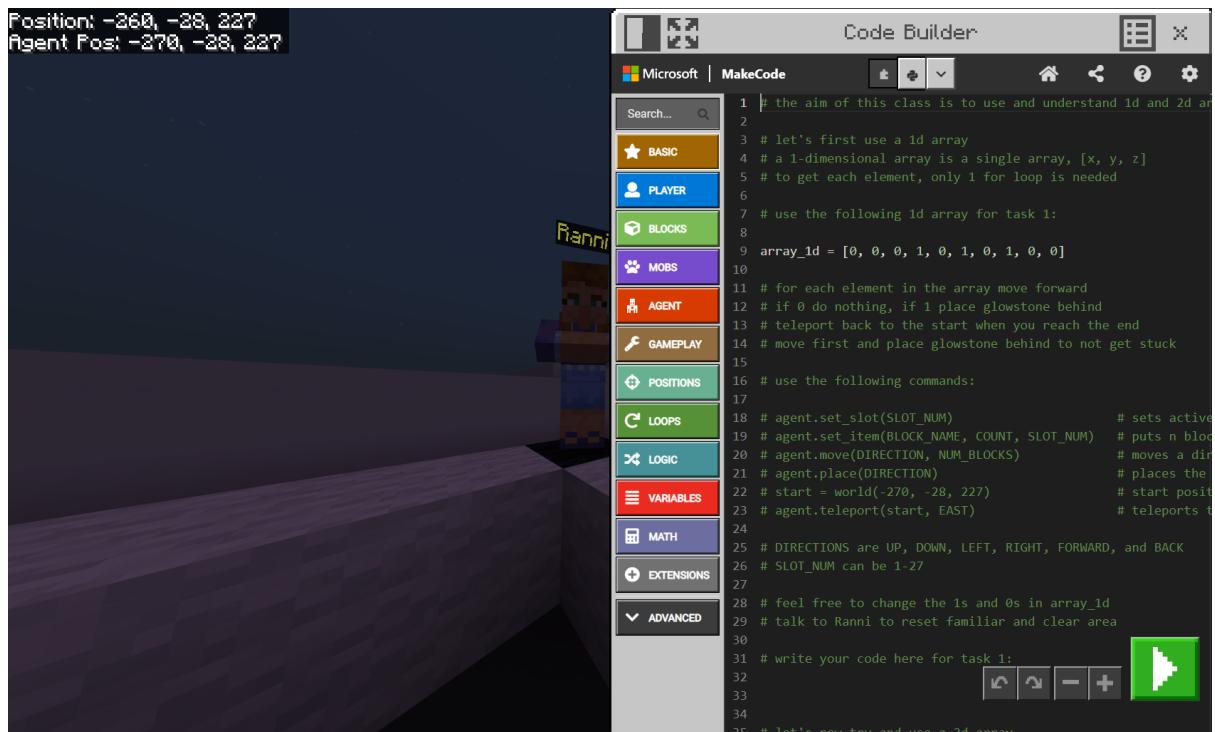
```
1 # the aim of this class is to use and understand 1d and 2d arrays
2
3 # let's first use a 1d array
4 # a 1-dimensional array is a single array, [x, y, z]
5 # to get each element, only 1 for loop is needed
6
7 # use the following 1d array for task 1:
8
9 array_1d = [0, 0, 0, 1, 0, 1, 0, 1, 0, 0]
10
11 # for each element in the array move forward
12 # if 0 do nothing, if 1 place glowstone behind
13 # teleport back to the start when you reach the end
14 # move first and place glowstone behind to not get stuck
15
16 # use the following commands:
17
18 # agent.set_slot(SLOT_NUM) # sets active slot
19 # agent.set_item(BLOCK_NAME, COUNT, SLOT_NUM) # puts n blocks
20 # agent.move(DIRECTION, NUM_BLOCKS) # moves a direction
21 # agent.place(DIRECTION) # places the active block
22 # start = world(-270, -28, 227) # start position
23 # agent.teleport(start, EAST) # teleports to start
24
25 # DIRECTIONS are UP, DOWN, LEFT, RIGHT, FORWARD, and BACK
26 # SLOT_NUM can be 1-27
27
28 # feel free to change the 0s and 1s in array_1d
29 # Agent has limited functionality and cannot
# teleport or move diagonally
```

The content above is provided by a user, and is not endorsed by Microsoft. [Report abuse](#) if you think it's not appropriate.

Privacy & Cookies | Terms Of Use | Trademarks | © 2022 Microsoft

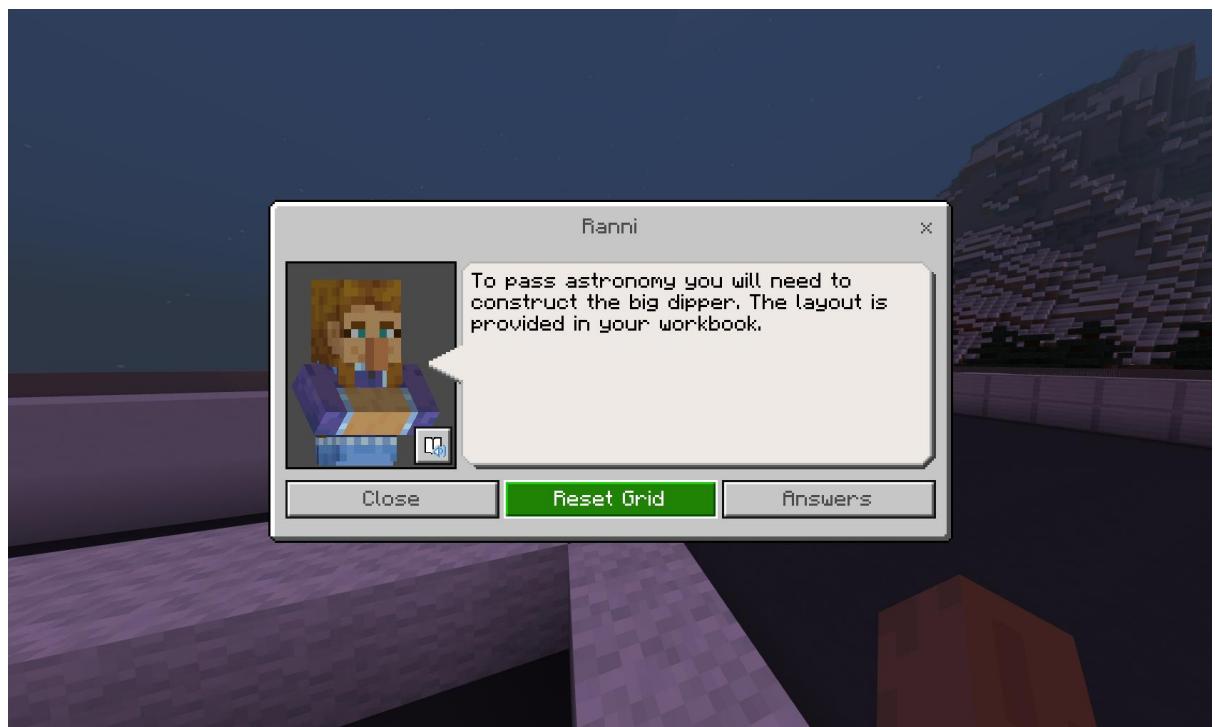
#### 44. Astronomy 2

To edit the code select Edit Code in the top right corner. The learners can now start writing code. Refer to the answer workbook for how the answers should look.



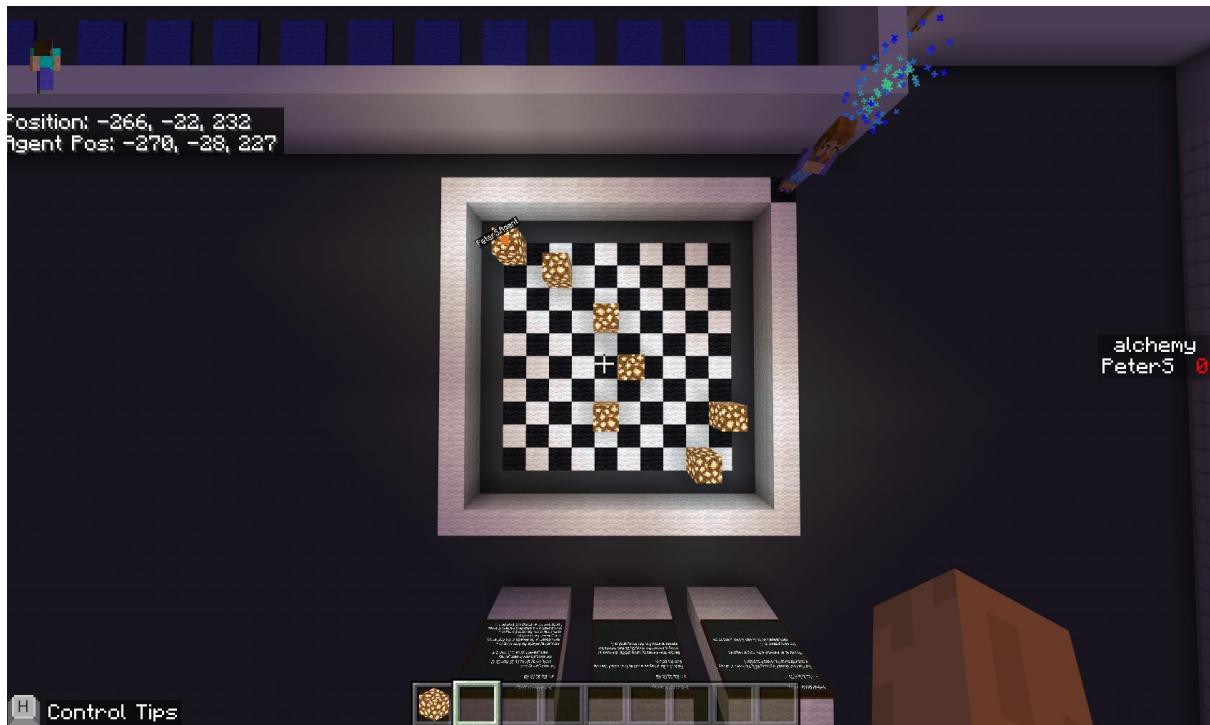
#### 45. Astronomy 3

The idea is to place glowstone blocks on the grid in order to create constellations. Once you have created one you can speak to Ranni and select Reset Grid to clear the glowstone.



#### 46. Astronomy 4

To complete the class the 2-dimensional array called array\_2d needs to be plotted correctly. It should look like the following.



#### 47. Astronomy 5

Ranni will have particles above her head once completed. Speak to her and select Complete to finish.



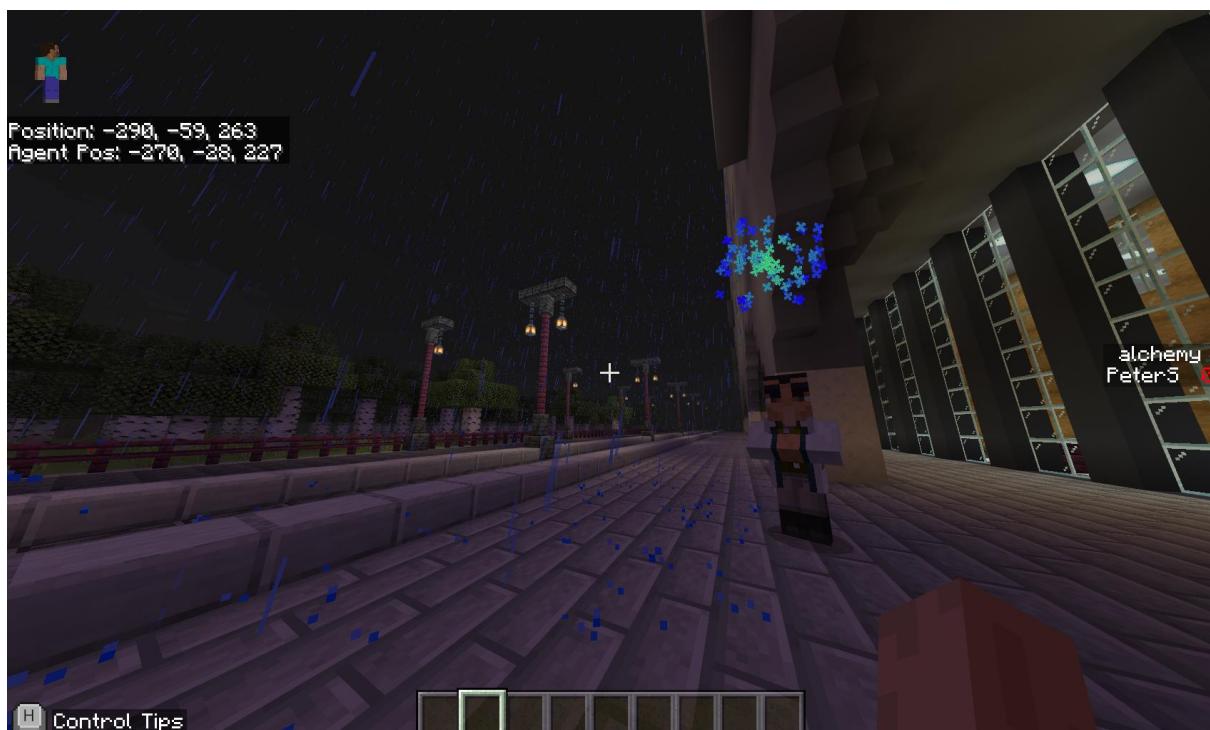
#### 48. New NPC 0

Once you have completed at least 3 classes a new NPC will be available at the front entrance. Only talk to this NPC when you want to end the game.



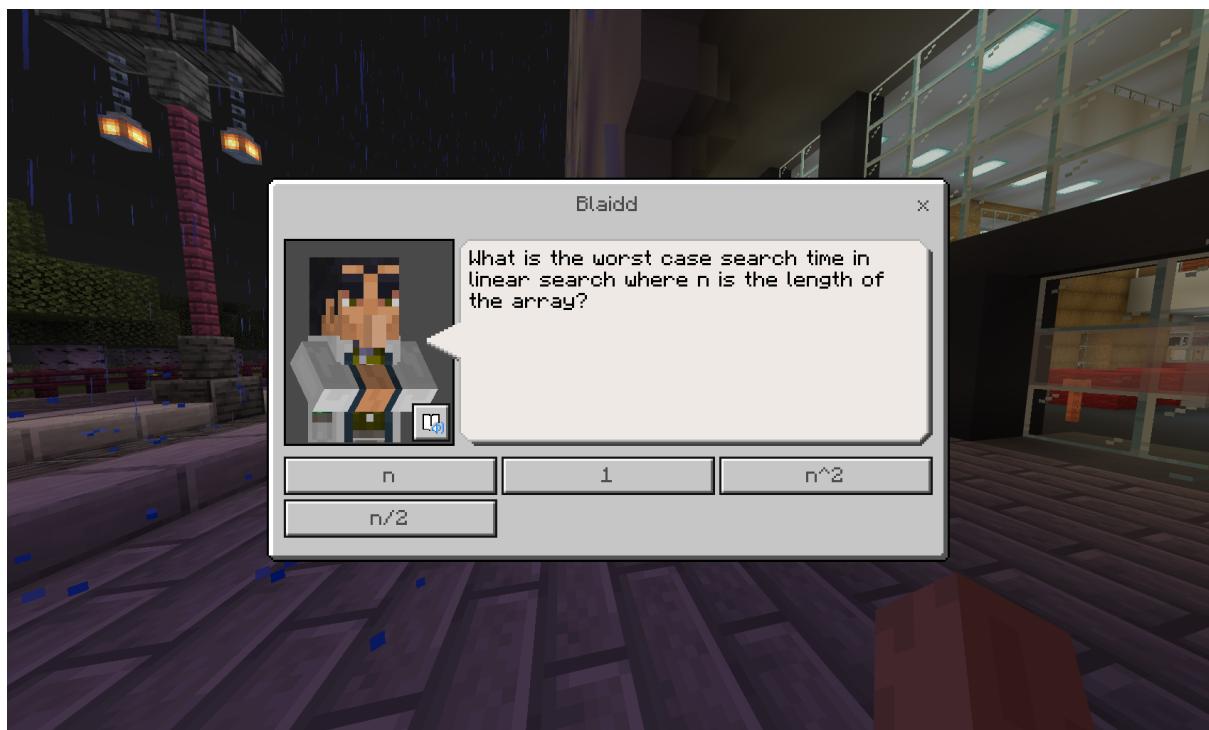
#### 49. New NPC 1

To start the end sequence, speak to Blaidd and select Yes to all. It will turn dark and start to rain.



#### 49. New NPC 2

Speak to Blaidd again and select Next, Next, Okay. You will be given questions related to the classes you completed. To move on you must select the correct answers. Refer to the answer workbook for the correct solutions.



#### 50. New NPC 3

Once all questions have been answered select Okay and you will be given 4 emerald blocks. A diamond pickaxe will also be provided incase you misplace the block.



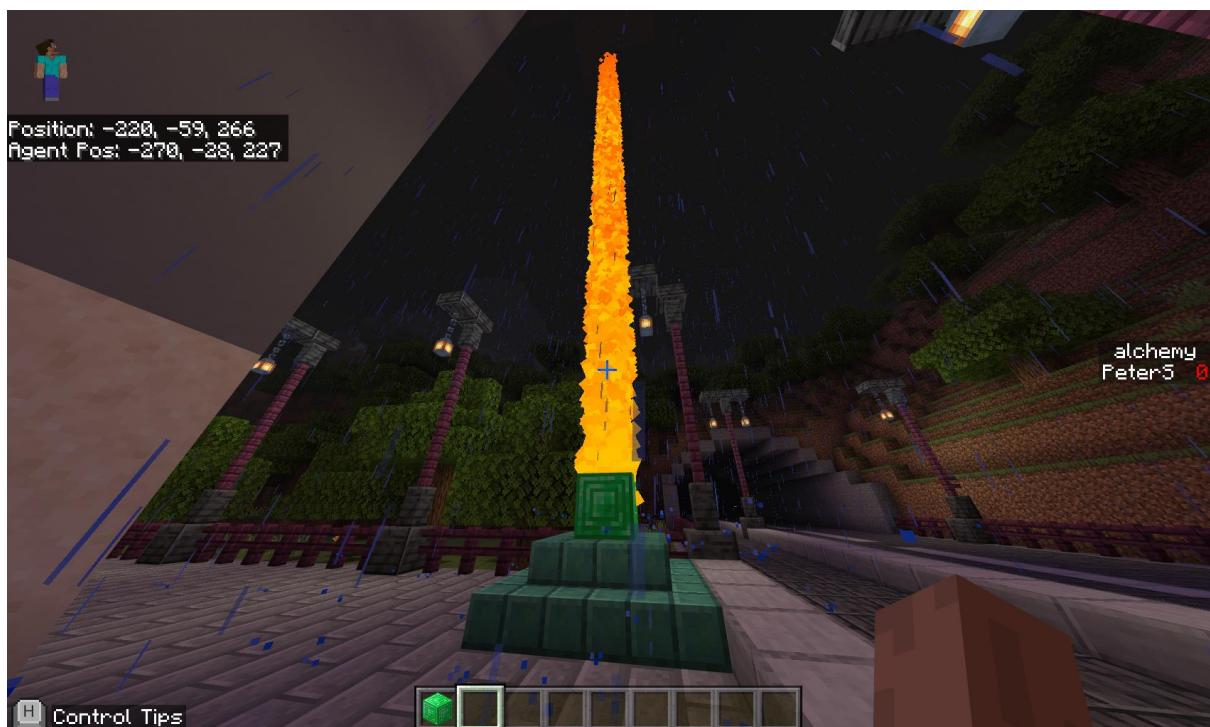
### 51. New NPC 4

Place the emerald blocks in the locations marked by the particles.



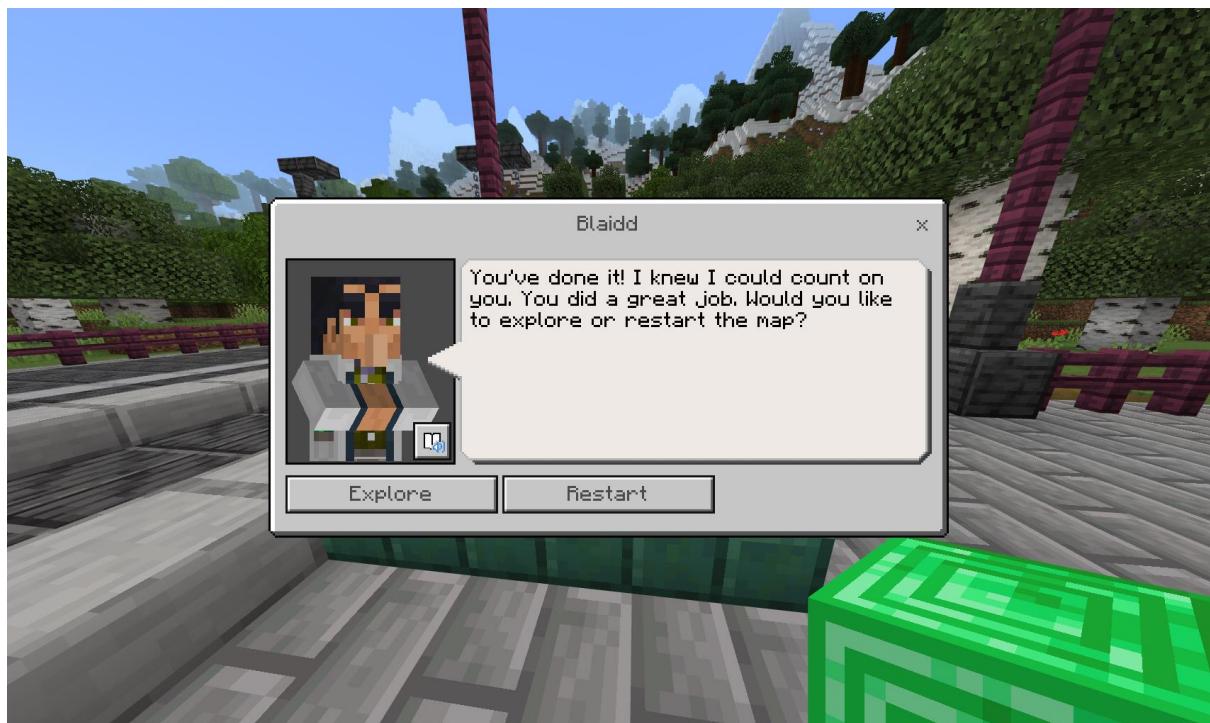
### 52. New NPC 5

If the emerald block is placed on the center of the pedestal the particles will turn orange.



### 53. New NPC 6

Once all blocks are placed Blaidd will talk to you. The world is now complete, and you can choose to either explore or restart.



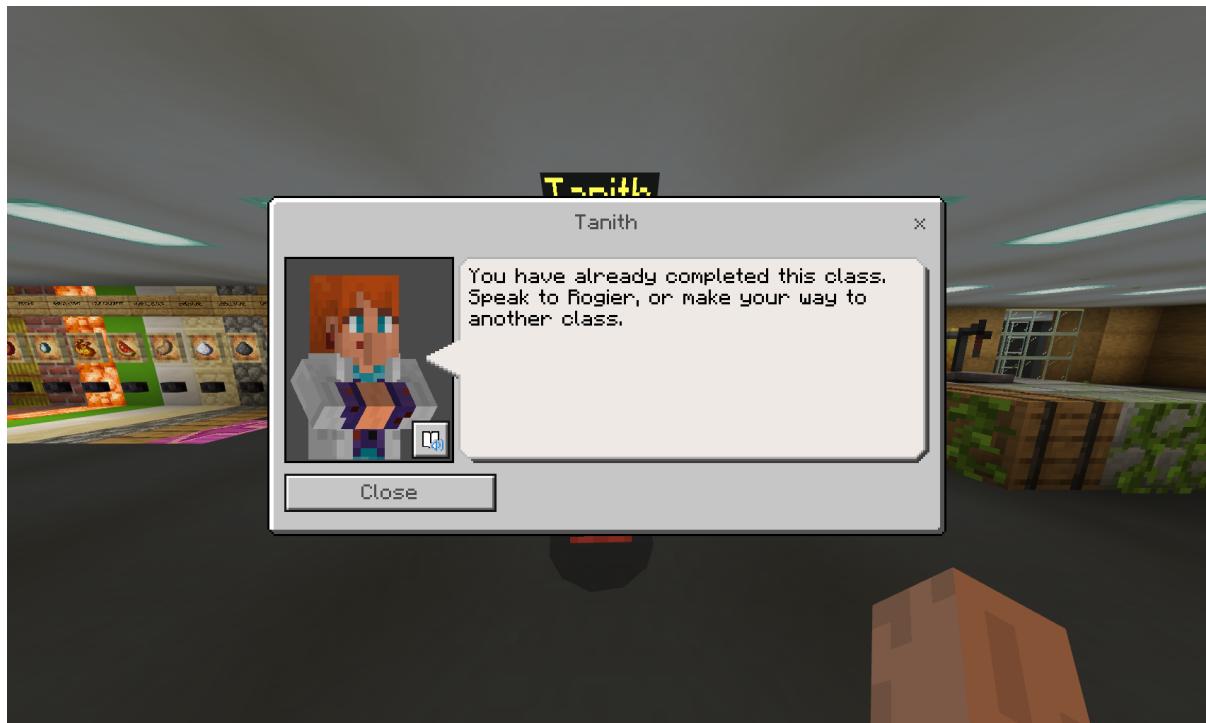
### 54. Common Problems 0

If you are lost and cannot find the room speak to one of the NPCs labelled Student Rep. They will teleport you outside the room. These NPCs can be found on each floor near the middle stairs.



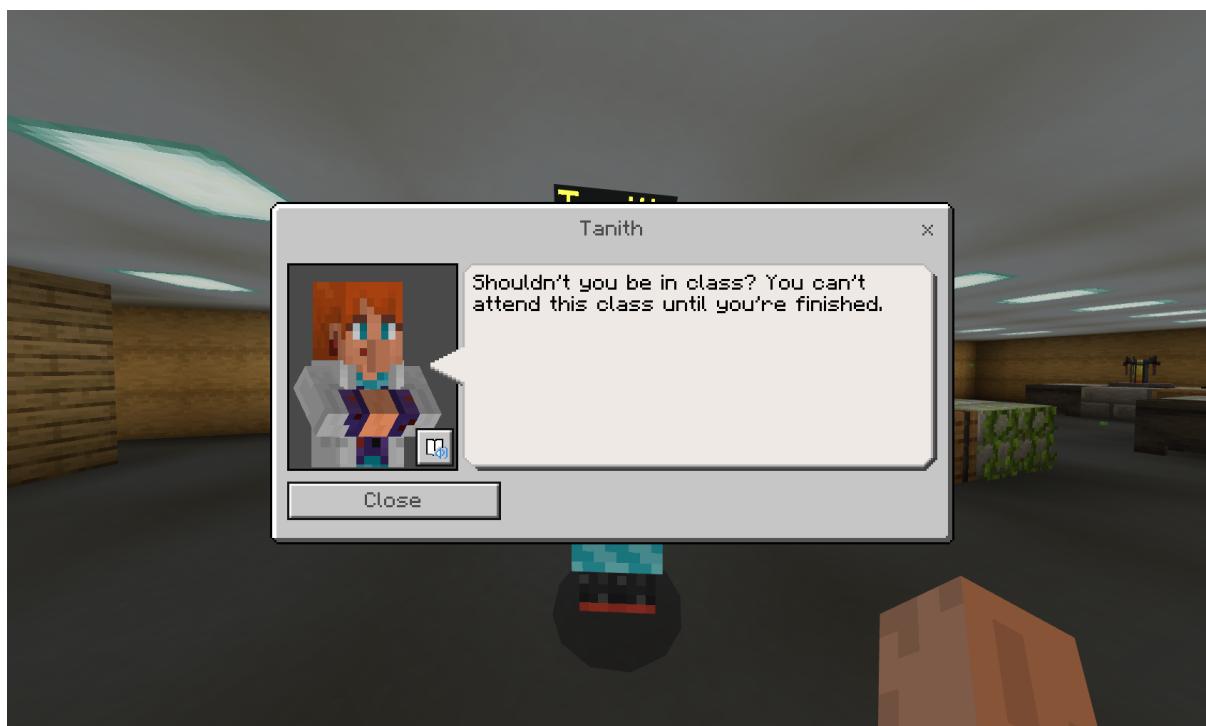
### *55. Common Problems 1*

You cannot redo a class if you have completed it. You will need to finish the map and select restart to redo a class.



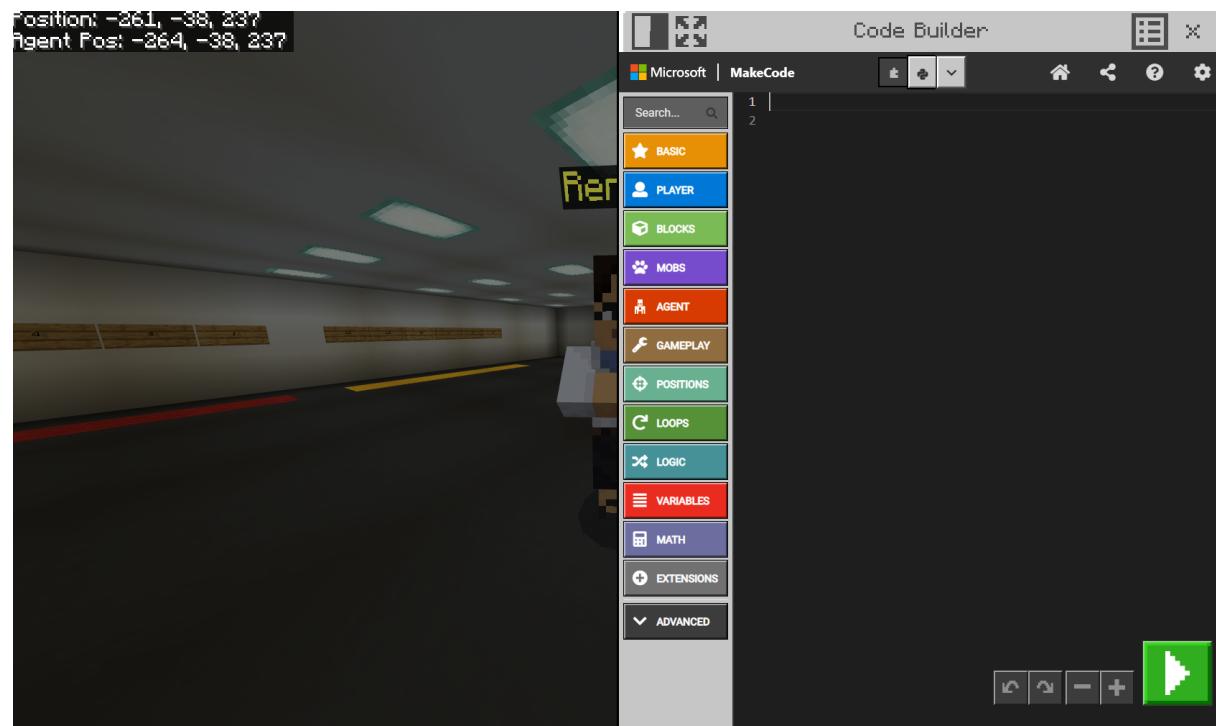
### *56. Common Problems 2*

If an NPC has the below dialogue when interacting with them, it is because you have already started a class and you must finish it before starting another.



### 57. Common Problems 3

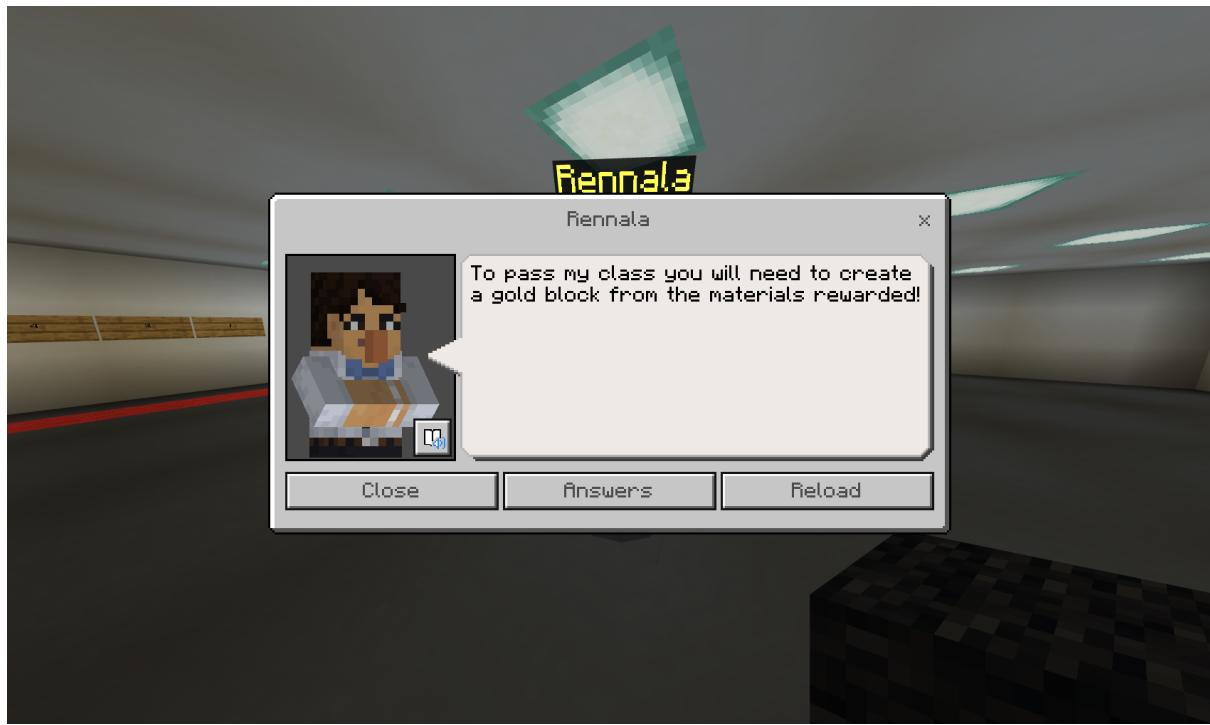
If you change the language used in the code editor, the tutorial will disappear. To fix this select the box next to the x in the top right corner and select ok.



It should then take you to the screen below. Close the editor and speak to the NPC of the class you are in.



Select Reload to open up the tutorial again.



### 58. Common Problems 4

In classes where the agent is used you can reset it by speaking to the NPC and selecting reset. It should also clear any blocks that are in the way of completing the task.



### 59. Common Problems 5

If the code editor is open and you tab out of the game, you may see the following message when opening the game again. If OK is selected, unsaved work will be lost. You will need to speak the NPC and select Reload to open the tutorial again.

