



House Building Challenge

1. Build your first “Hello World” Minecraft Pi / Python programme by copying Minecraft Flash Card 3 to post a message in to the Minecraft world.
2. Start a new programme and make a single brick with Minecraft Flash Card 7 – try changing the block type
3. Extend the single block programme to build a whole row of a wall – you might want to use Python Flash Card 12 – the “for” command
4. Further extend the single row of a wall programme to build a whole wall – you’ll need two “for” loops – length of wall, and height
5. Replace the “for” loops with the Minecraft Pi function

```
mc.setBlocks(x0, y0, z0, x1, y1, z1, blockType, blockData)
```

6. How long / high is a wall? Use Python Flash Card 5 – “raw_input” and “int” – to build a wall where the user specifies the size
7. A house has four walls (generally!!) – extend the single wall programme to build four connecting walls – you might want to use Minecraft Flash Card 4 – Coordinates – to ensure the walls meet up.
8. Using the block types cheatsheet, change your four walled house programme to have a window, or more, and a door.
9. Plant a garden by creating a separate programme that plants a flower behind you as you move about. You’ll need to combine the single block programme from above and use the Minecraft Pi function

```
mc.getPos()
```

10. **Go forth and build! Programme a garden city with different sized house and green spaces!!**



Use the mouse to look around and use the following keys on the keyboard:

Key	Action
W	Forward
A	Left
S	Backward
D	Right
E	Inventory
Space	Jump
Double Space	Fly / Fall
Esc	Pause / Game menu
Tab	Release mouse cursor