# Rubik's Cube Solving Challenge

[HumanEd](#) is the Humanoid Robotics Society of UoE. One of our subprojects aims to solve Rubik's Cubes using a Biomimetic Hand. As inspiration coming from our project, we have decided to prepare a Rubik's Cube painting challenge!

Amongst the templates provided, you'll find a script that, when run, outputs a net of a 2 by 2 rubiks cube as shown below.
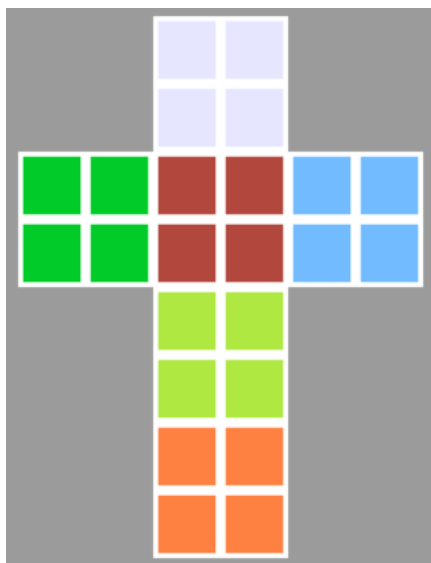
Task 1

Your first task is to convert that script from a 2x2 rubiks cube printer to a 3x3 rubiks cube printer. As such your output should be something like the below (the colours don't matter)
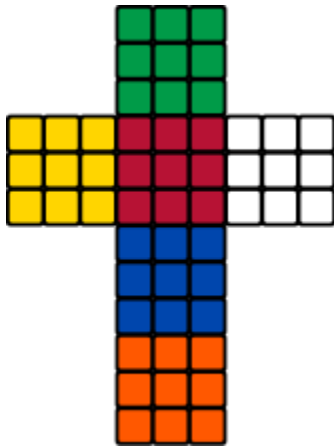
Task 2

The second task is to adjust the script so it accepts a string and prints out a cube with the coloration matching that which the string dictates. Each character in the string corresponds to a colour. Each index of the string corresponds to a position on the cube. The correspondence of the indices to the cube is shown below, on the next page (the net is rotated 90 degrees).

```
              ------------------
              | 0  | 1   | 2 |
              ------------------
              | 3  | 4   | 5 |
              ------------------
              | 6  | 7   | 8 |
-------------------------------------------------------------------
| 9   | 10 | 11 | 18 | 19 | 20 | 27 | 28 | 29 | 36 | 37 | 38 |
-------------------------------------------------------------------
| 12 | 13 | 14 | 21 | 22 | 23 | 30 | 31 | 32 | 39 | 40 | 41 |
-------------------------------------------------------------------
| 15 | 16 | 17 | 24 | 25 | 26 | 33 | 34 | 35 | 42 | 43 | 44 |
-------------------------------------------------------------------
              | 45 | 46 | 47 |
              ------------------
              | 48 | 49 | 50 |
              ------------------
              | 51 | 52 | 53 |
              ------------------
```

You should also adjust the colours to suit the colors listed below as well:
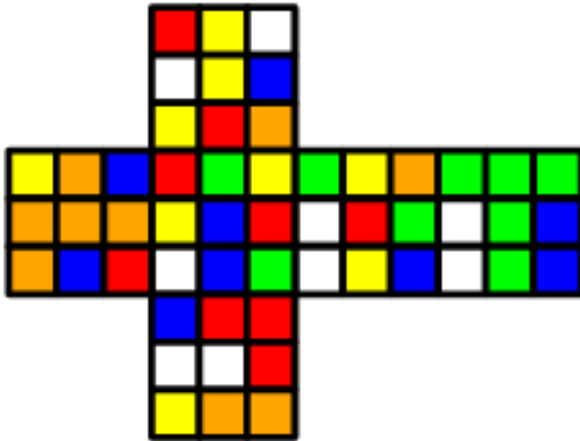
Color representation:
- b = [b]lue   r = [r]ed
- w = [w]hite   y = [y]ellow
- o = [o]range   g = [g]reen

EXAMPLE

exampleCube =
"rywwybyroyoboooobrrgyybrwbggyowrgwybgggwgbwgbbrrwwryoo"

Broken down into each cube panel this input would be
"rywwybyro,yoboooobr,rgyybrwbg,gyowrgwyb,gggwgbwgb,brrwwryoo"
bare in mind that this input would not come in this format, only in the
format shown in exampleCube