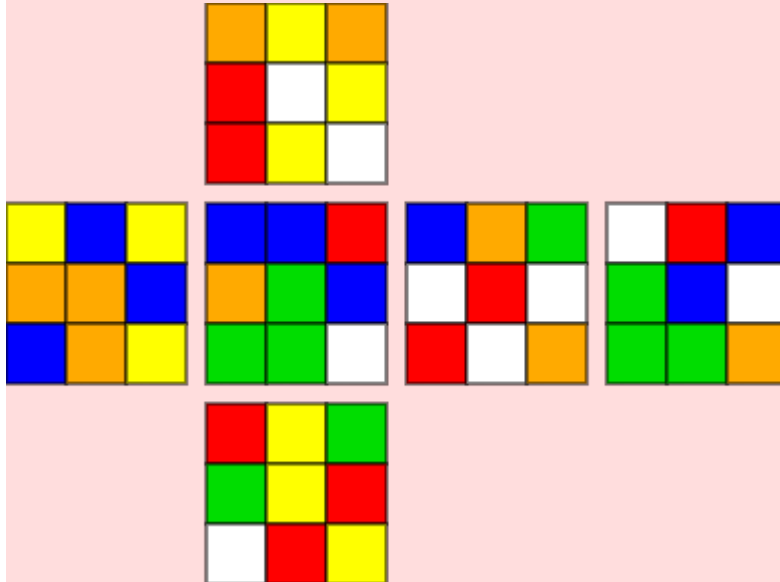# Assignment- Cube theory
25.05.2021

1. With white on top and green in front, apply the following scramble to a Rubik's cube (refer to below image if you don't have one):
R2 D2 L' U D B U F B' U L2 U' F2 D2 R2 D B2 U R2 F2 D

In the index orientation structure, the state of this cube is
perm[]={6,10,5,7,4,1,8,9,2,11,3,0,13,15,18,19,12,16,14,17,0,0,0,0,0,1,1,0,1,1,0,0,2,1,2,2,2,0,0}
Some of the numbers in the above state are wrong. Identify them and rewrite the correct state in the same format. Also give a short explanation of why the array element(s) are wrong.

2. Give the permutation created by the moves LLDD in normal form and 2-cycle form (as given for the F face turn).

3. What is the order of the generator UUDD and why?