Question set 1

1. A list is either empty or it is composed of a first element (head) and a tail, which is a list itself. In Prolog we represent the empty list by the atom [] and a non-empty list by a term [H|T] where H denotes the head and T denotes the tail.

Rotate a list N places to the right.

2. Given a graph and a fixed number of colours, the problem consists in assigning a colour to each vertex of the graph. Colouring must be proper, in the sense that no adjacent vertices are assigned the same colour.
Assume four colours are available: Red, blue, green and yellow. Write python problem providing the solution.

Eg.
If 1 is assign red colour, now 3 cannot be assigned red colour. So we assign blue colour to 3, so now blue cannot assigned to 6,9,7 and 4.