Red Black Trees

→ nodes either red or black
→ BLAK root
→ new insertions are always red
→ every path from root to the leaves should have same nr of black nodes
→ no path can have 2 consecutive RED nodes
→ nulls are black
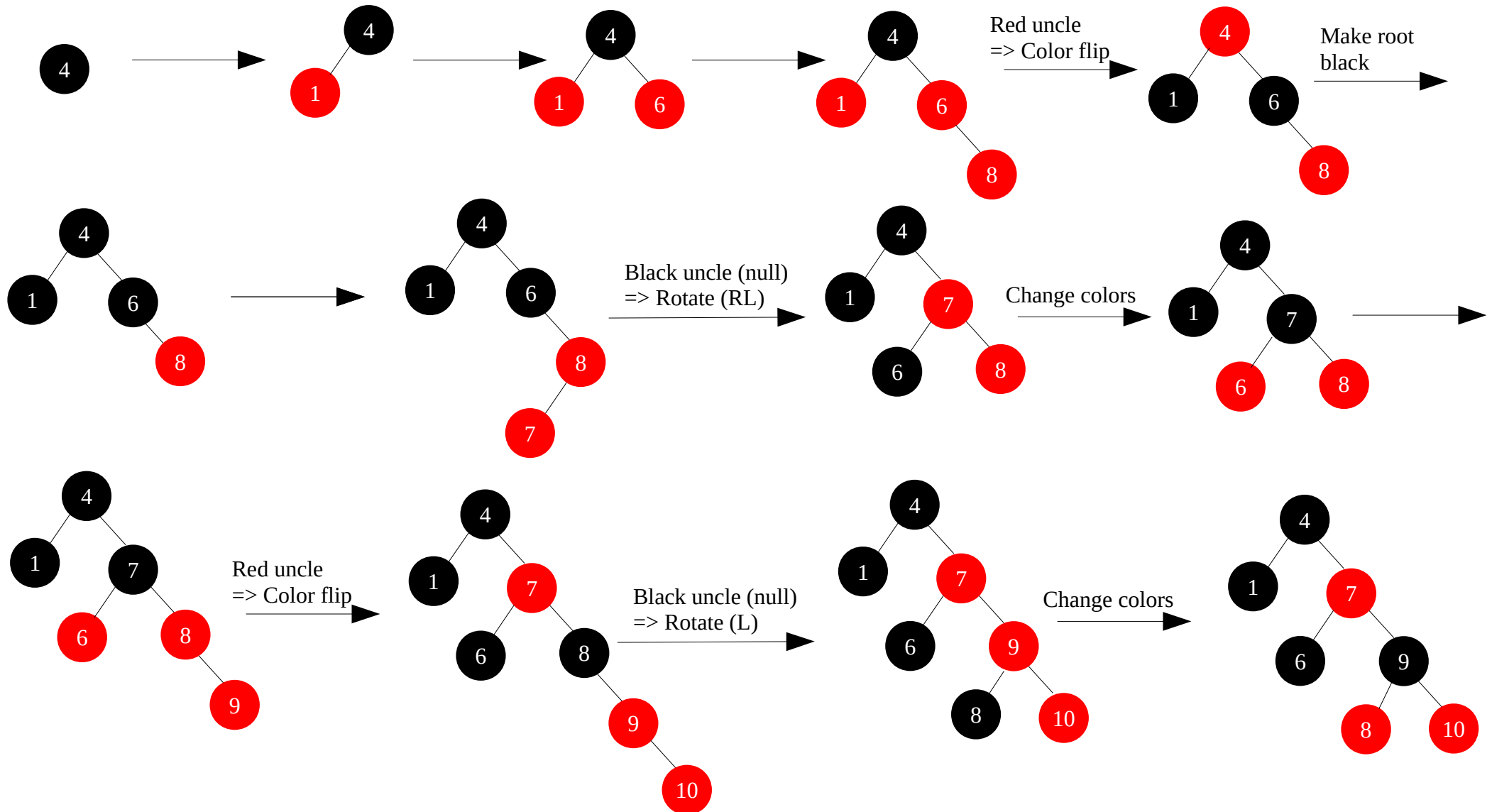
Rebalance:

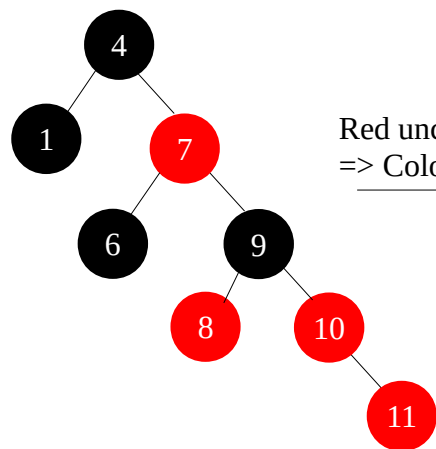* Black uncle: Rotate
* Red uncle: Color flip

After rotation:
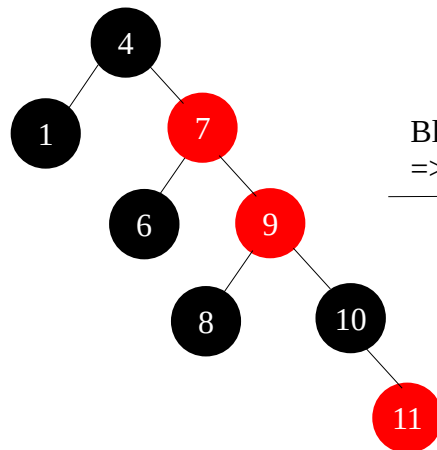**Black**
Red   **Red**

After color flip:
Red
Black   **Black**

4, 1, 6, 8, 7, 9, 10, 11

Red uncle
=> Color flip

Make root black

Black uncle (null)
=> Rotate (RL)

Change colors

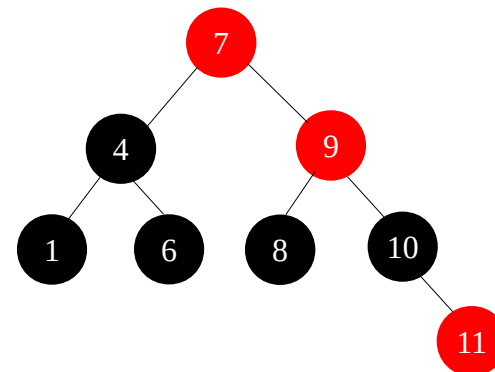Red uncle
=> Color flip

Black uncle (null)
=> Rotate (L)

Change colors

Red uncle
=> Color flip

Black uncle
=> Rotate (L)

Change colors