

1.) 9, 26, 50, 15, 2, 21, 36, 22, 31 $M=11$

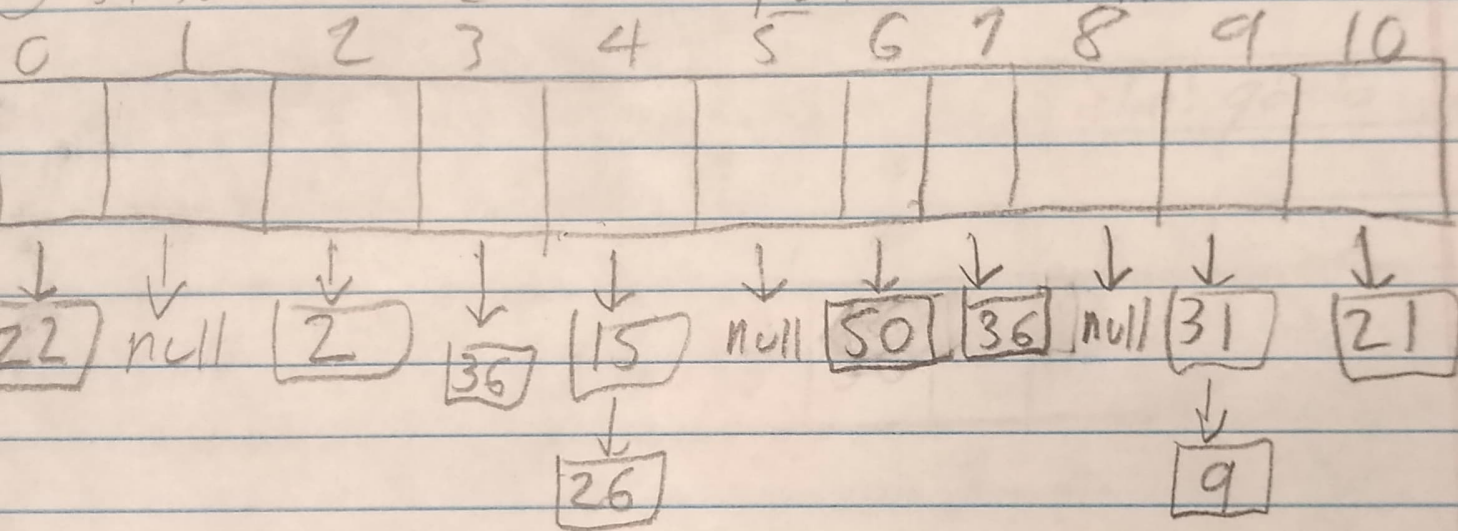
a.) Linear Probing

- (1) $9 \% 11 = 9$
- (2) $26 \% 11 = 4$
- (3) $50 \% 11 = 6$
- (4) $15 \% 11 = 4$ collision! go to index 5
- (5) $2 \% 11 = 2$
- (6) $21 \% 11 = 10$
- (7) $36 \% 11 = 3$
- (8) $22 \% 11 = 0$
- (9) $31 \% 11 = 9$ collision! go to index 10. Collision! go to index 0. collision! go to index 1.

22	31	2	36	26	15	50	null	null	9	21
Index: 0	1	2	3	4	5	6	7	8	9	10

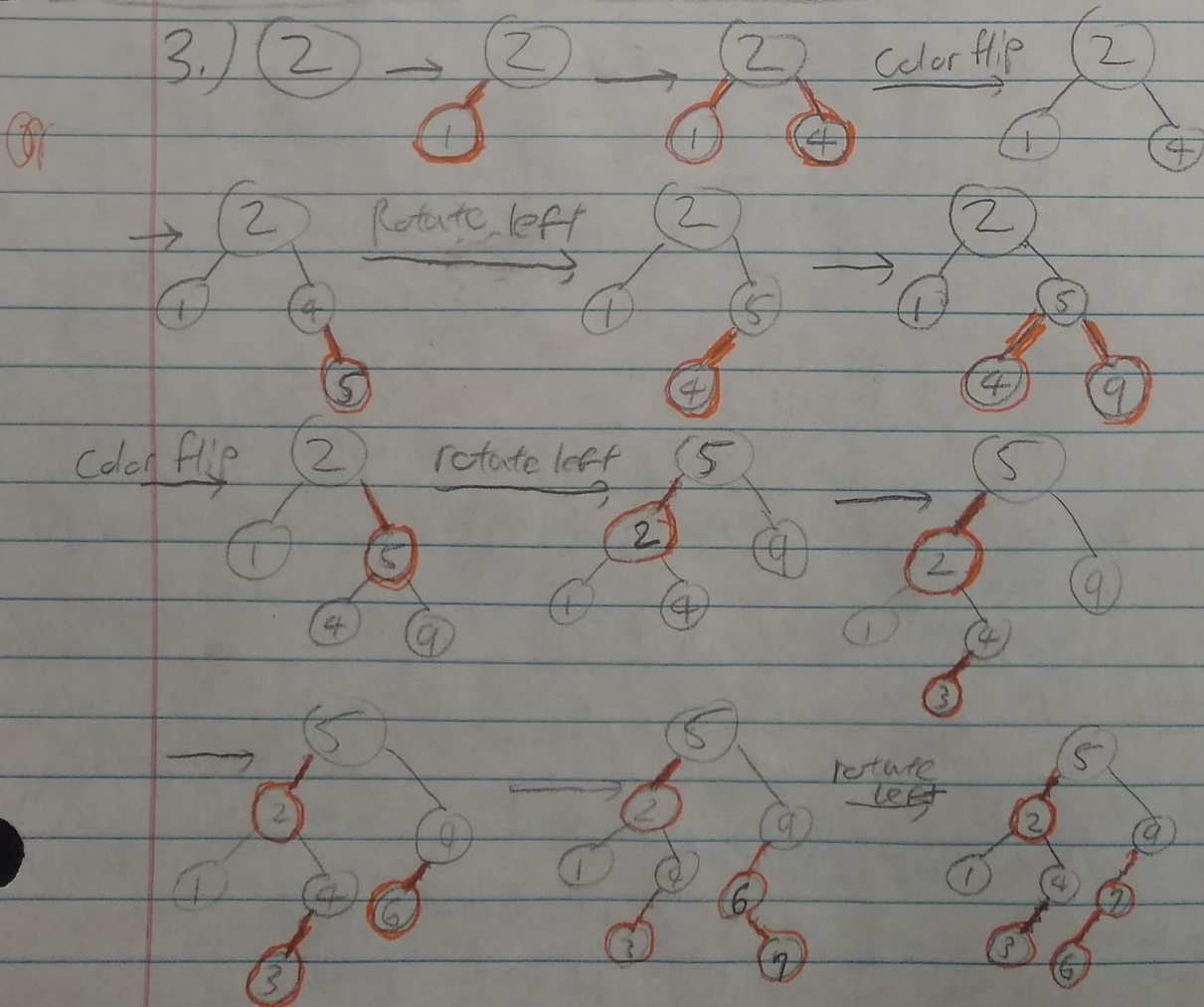
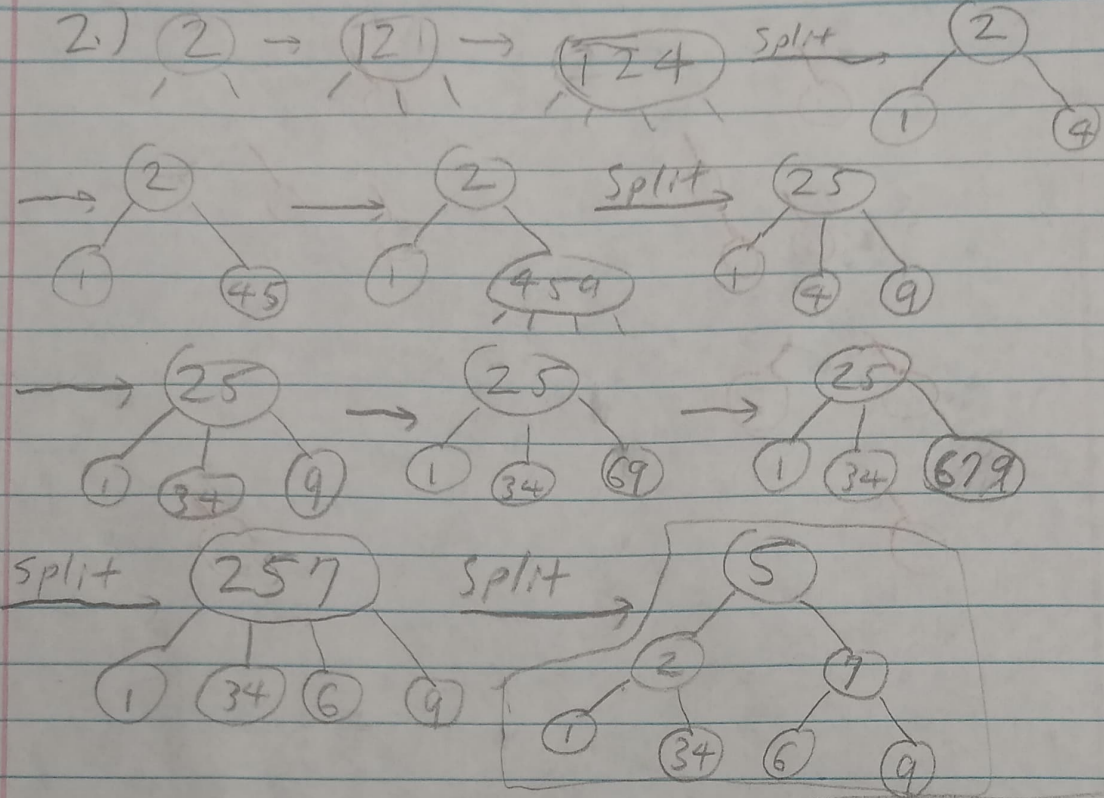
1.) b.) Separate Chaining

- ① $9 \% 11 = 9$
- ② $26 \% 11 = 4$
- ③ $50 \% 11 = 6$
- ④ $15 \% 11 = 4$ collision! put at the front of 4th chain
- ⑤ $2 \% 11 = 2$
- ⑥ $21 \% 11 = 10$
- ⑦ $36 \% 11 = 3$
- ⑧ $22 \% 11 = 0$
- ⑨ $31 \% 11 = 9$ collision! put at the front of the 9th chain



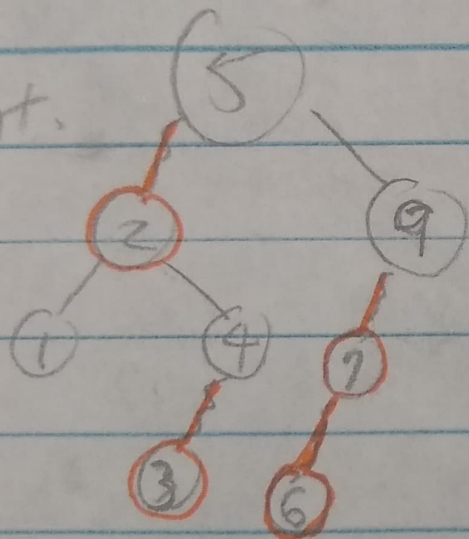
CS 171 Assignment 7

Tommy
Shaelje

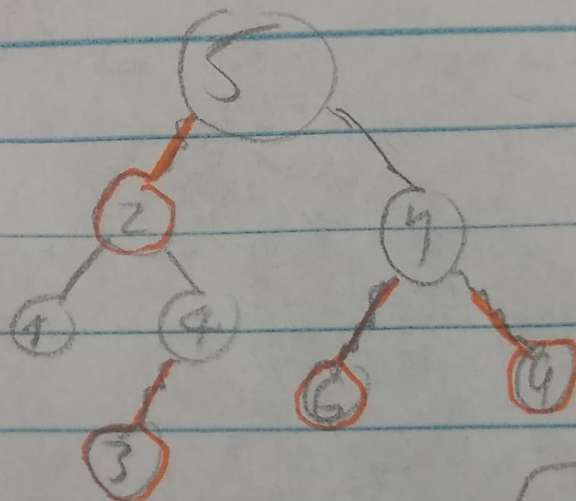


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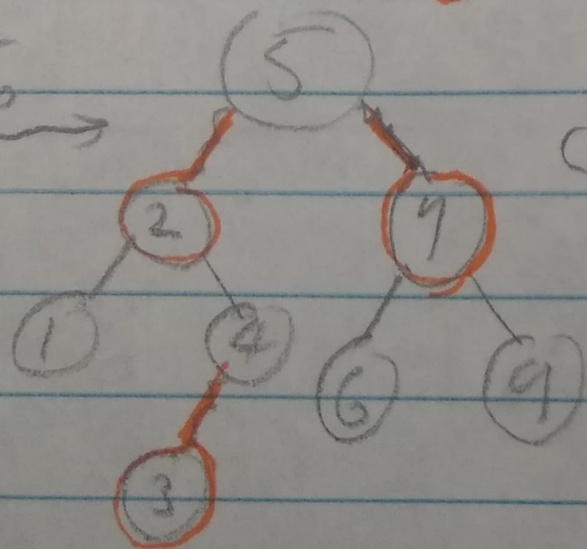
3.1 cont.



rotate
right



color
flip



color flip
(and keep the root black)

