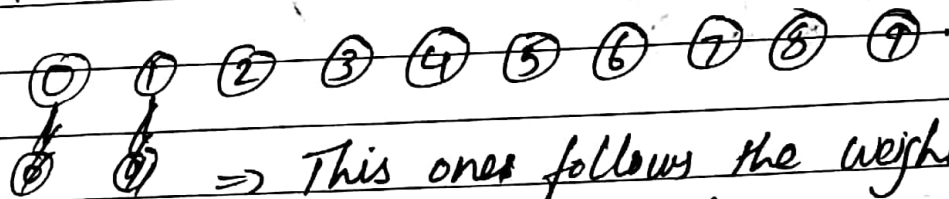


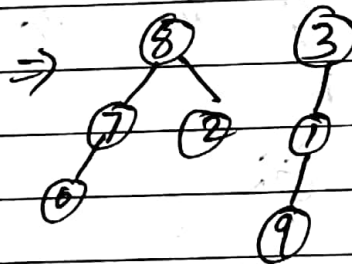
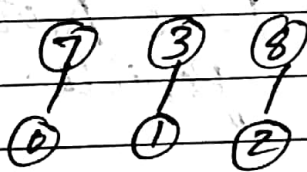
Assignment - 2

1) $id[i] = 0 \ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9$
 $i = 0 \ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9$



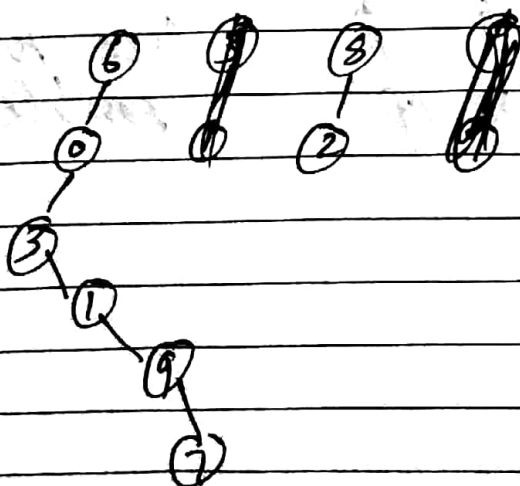
\Rightarrow This one follows the weighted quick union with path compression.

2) $id[i] = 7 \ 3 \ 8 \ 3 \ 4 \ 5 \ 6 \ 8 \ 8 \ 1$
 $i = 0 \ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9$



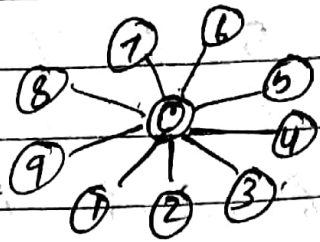
* This one doesn't follow path compression.

3) $id[i] = 6 \ 3 \ 8 \ 0 \ 4 \ 5 \ 6 \ 9 \ 8 \ 1$
 $i = 0 \ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9$



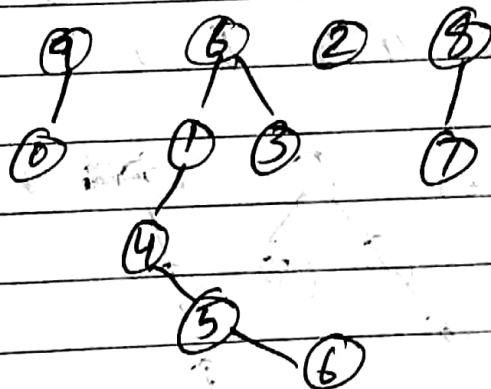
\therefore Not a compressed path.

4) $id[i] = 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0$
 $i = 0 \ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9$



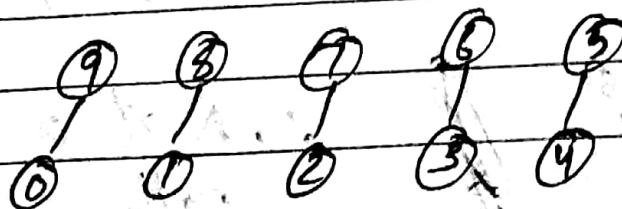
\Rightarrow This follows path compression.

5) $id[i] = 9 \ 6 \ 2 \ 6 \ 1 \ 4 \ 5 \ 8 \ 8 \ 9$
 $i = 0 \ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9$



Tree Not possible.

6) $id[i] = 9 \ 8 \ 7 \ 6 \ 5 \ 4 \ 3 \ 2 \ 1 \ 0$
 $i = 0 \ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9$



Tree Not possible.