

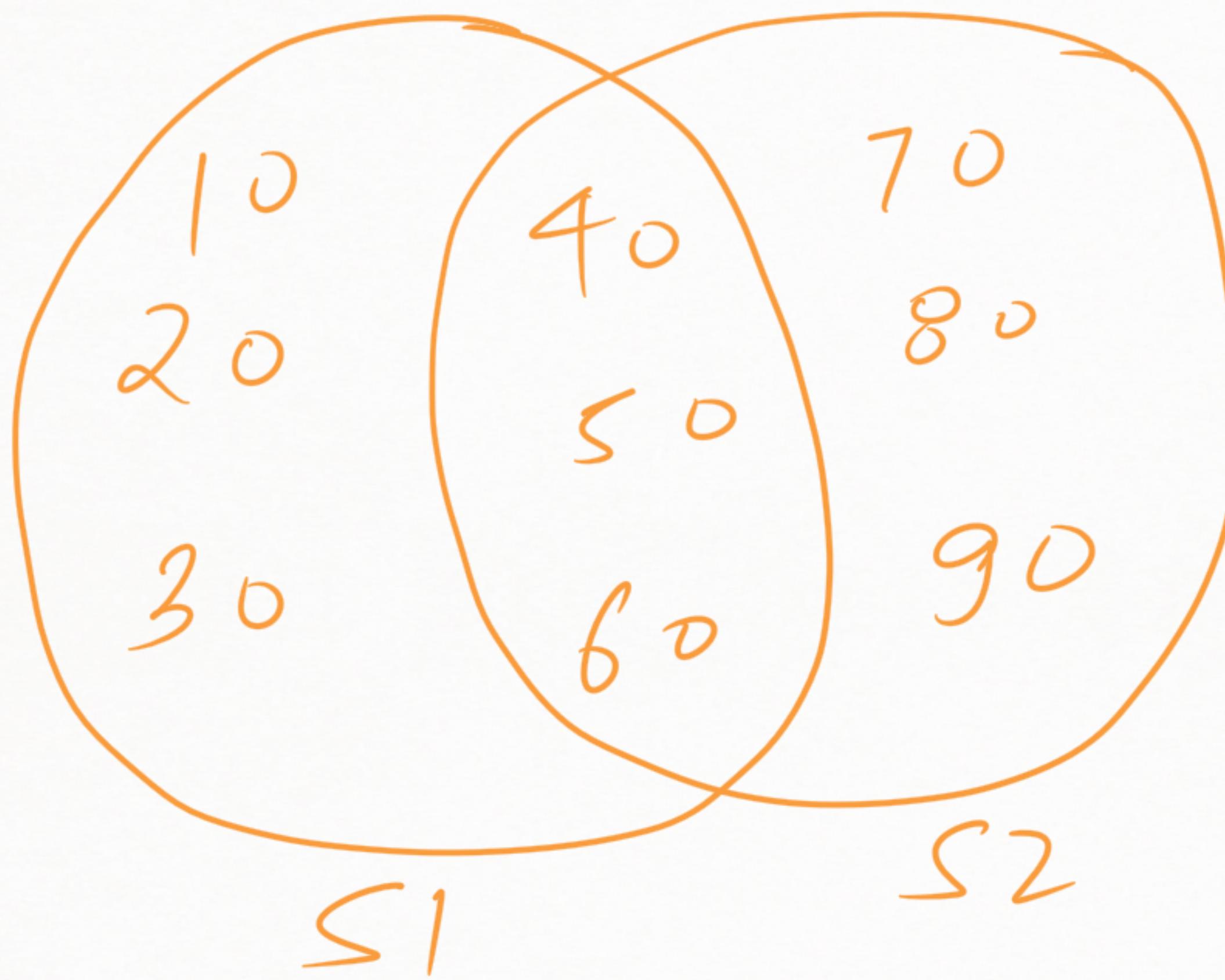
UNION

10, 20, 30, 40

50, 60, 70, 80, 90

INTERSECTION

40, 50, 60



$S_1 \text{ DIFFERENCE } S_2$

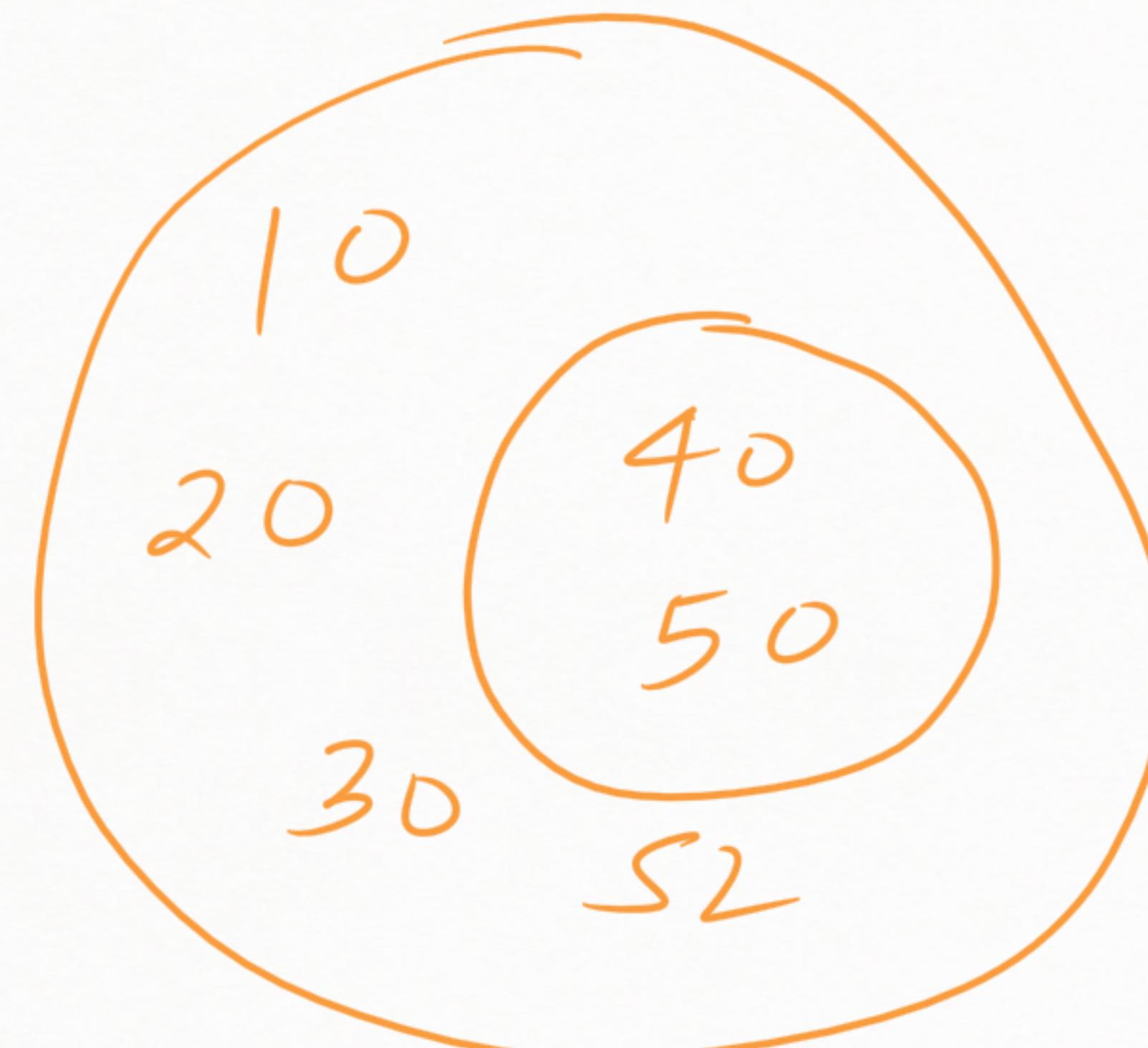
$$\Rightarrow \overline{S_1 - S_2} = \overline{10, 20, 30}$$

$S_2 \text{ DIFFERENCE } S_1$

$$\Rightarrow \overline{S_2 - S_1} = \overline{70, 80, 90}$$

$S_1 \text{ SYMMETRIC DIFF }$   
 $(S_1 - S_2) + (S_2 - S_1)$   
 $10, 20, 30, 70, 80, 90$

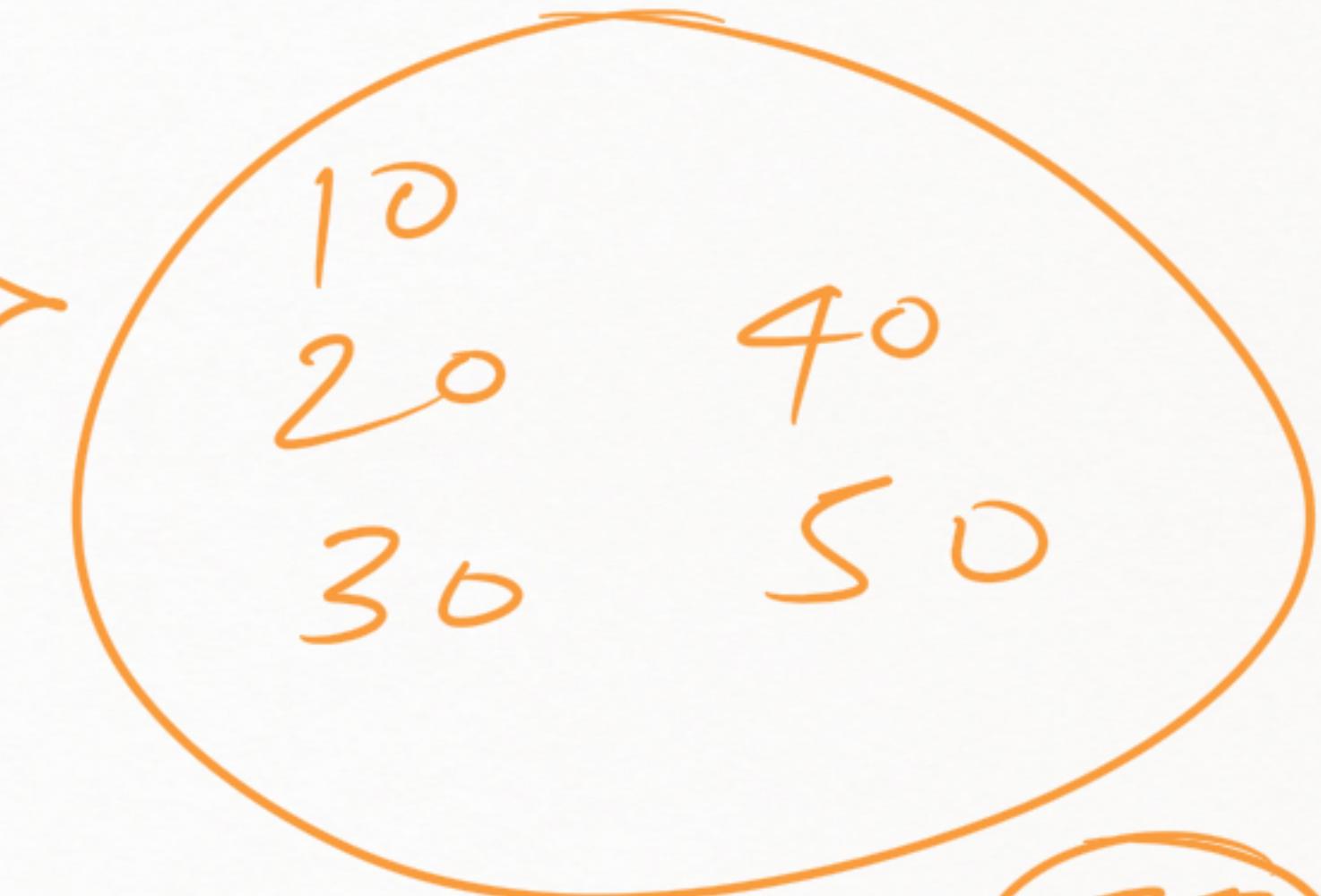
## # Subset and Superset



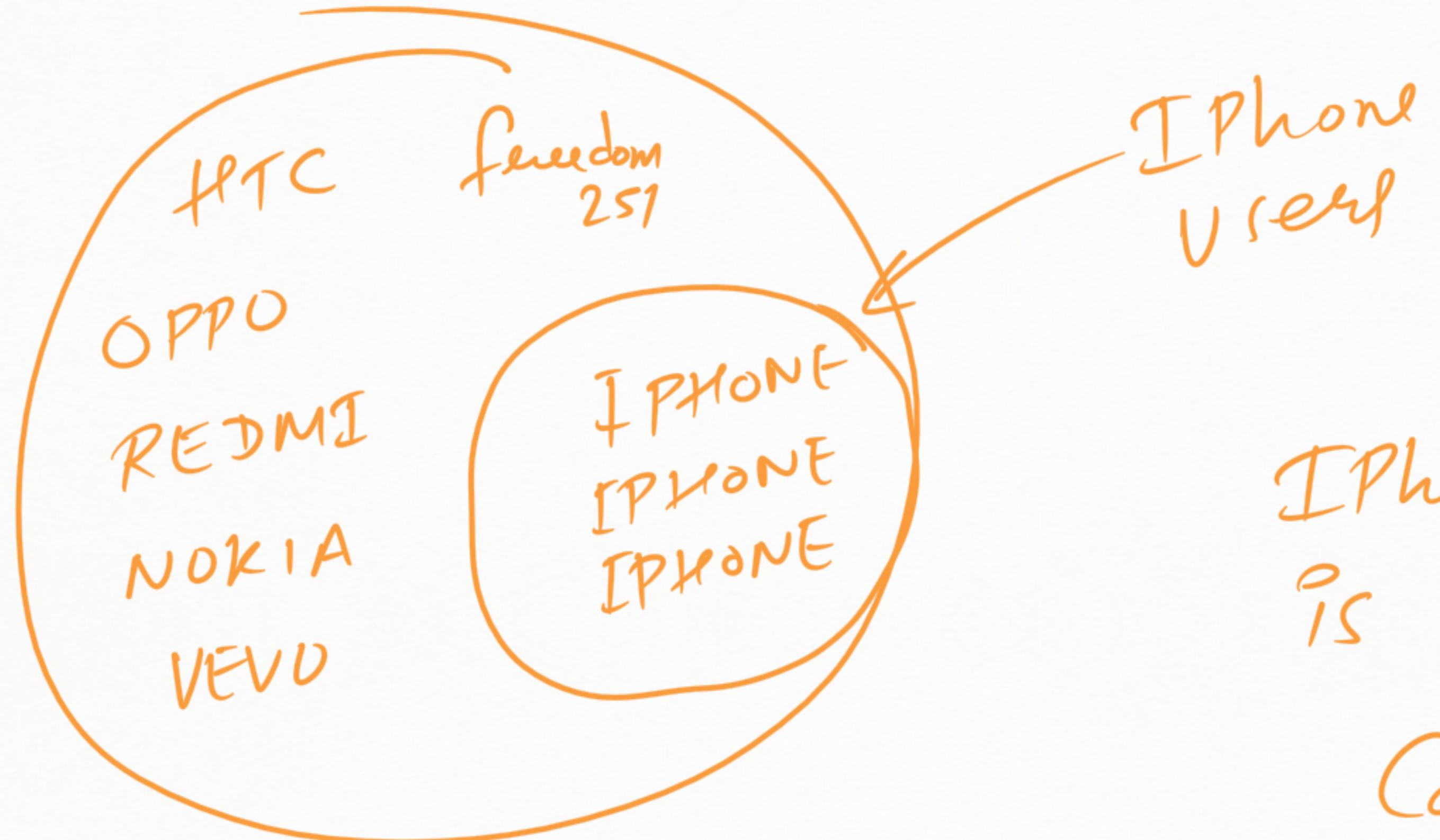
$S_2 \Rightarrow$



$S_1 \Rightarrow$



$\circled{S_2}$  is a SUBSET of  $\circled{S_1}$



Cell phone Users

iPhone Users  
is a subset of  
Cell phone Users.

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Cell phone Users are  
super set of iPhone Users