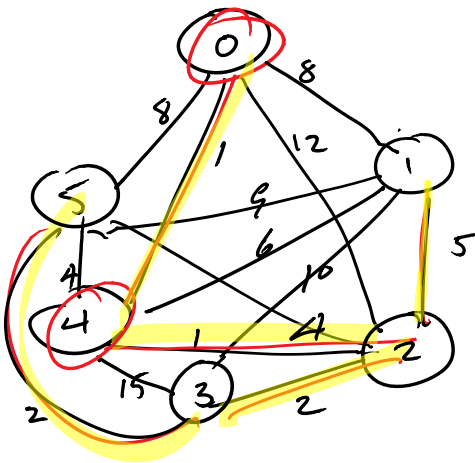


$T_0: (x_1, y_1) (x_2, y_2) \dots ()$
 $T_1: () \dots ()$



MST

Prim's Algorithm

$V = \{0, 1, 2, 3, 4, 5\}$

$S = \{0\}$

while $(|V-S| > 0)$

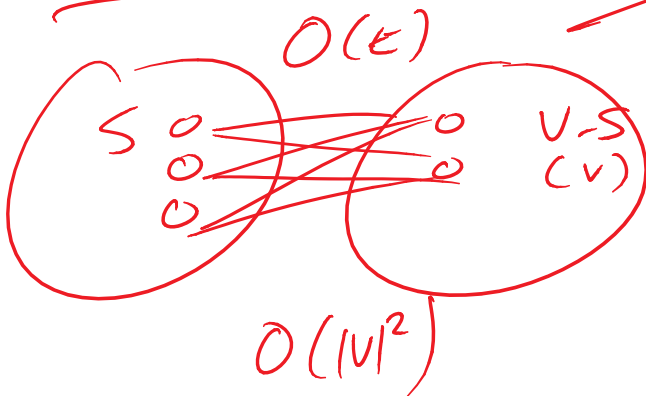
pick edge (u,v)

s.t. $u \in S$ and

$v \in V-S$ and

min edge

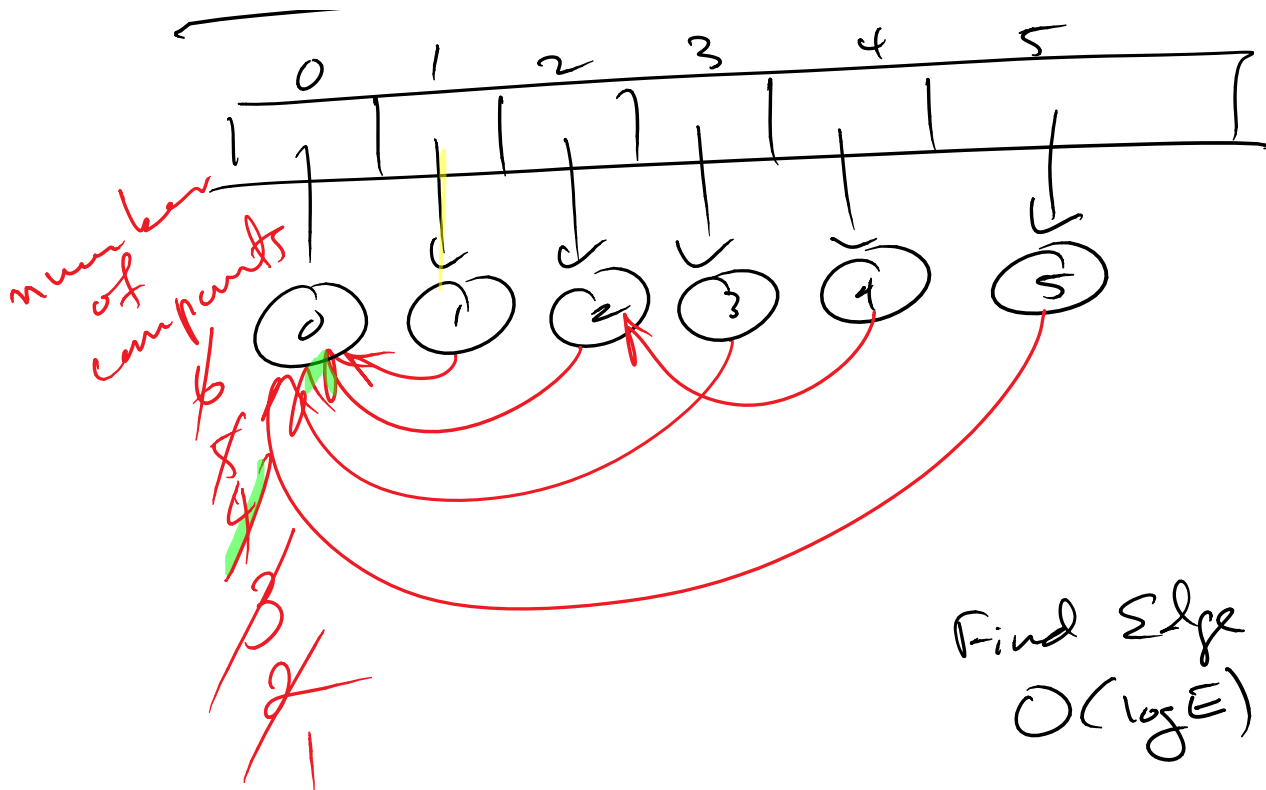
$S = S \cup \{v\}$



Union-Find Algorithm

Kruskal's Alg.

0 1 2 3 4 5



$(2, 4) 1$
 $(0, 4) 1$
 $(2, 3), 2$

Find Edge $(3, 5) 2$
 $O(\log E)$ $(2, 1) 5$
 11

