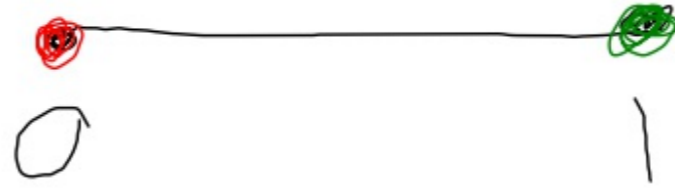
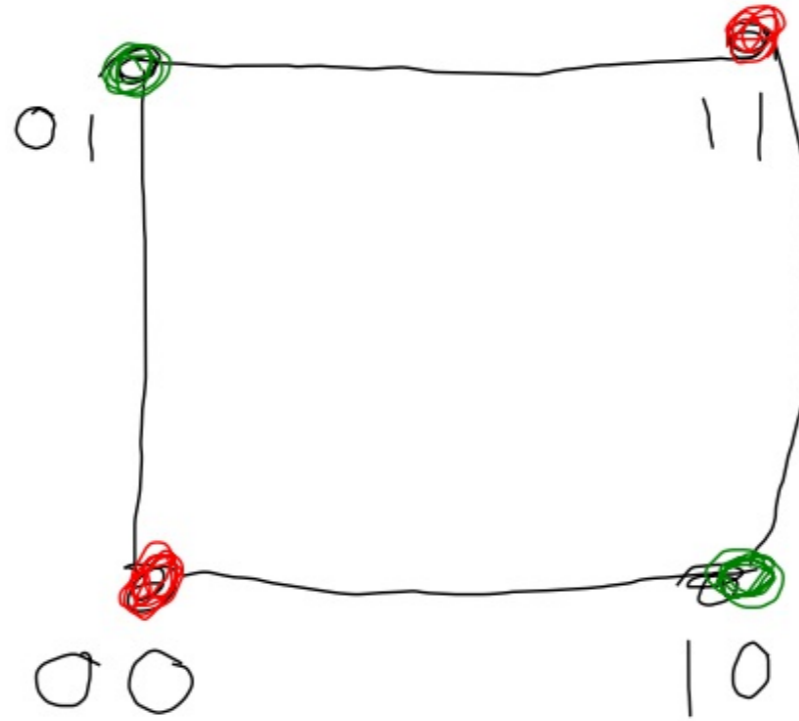


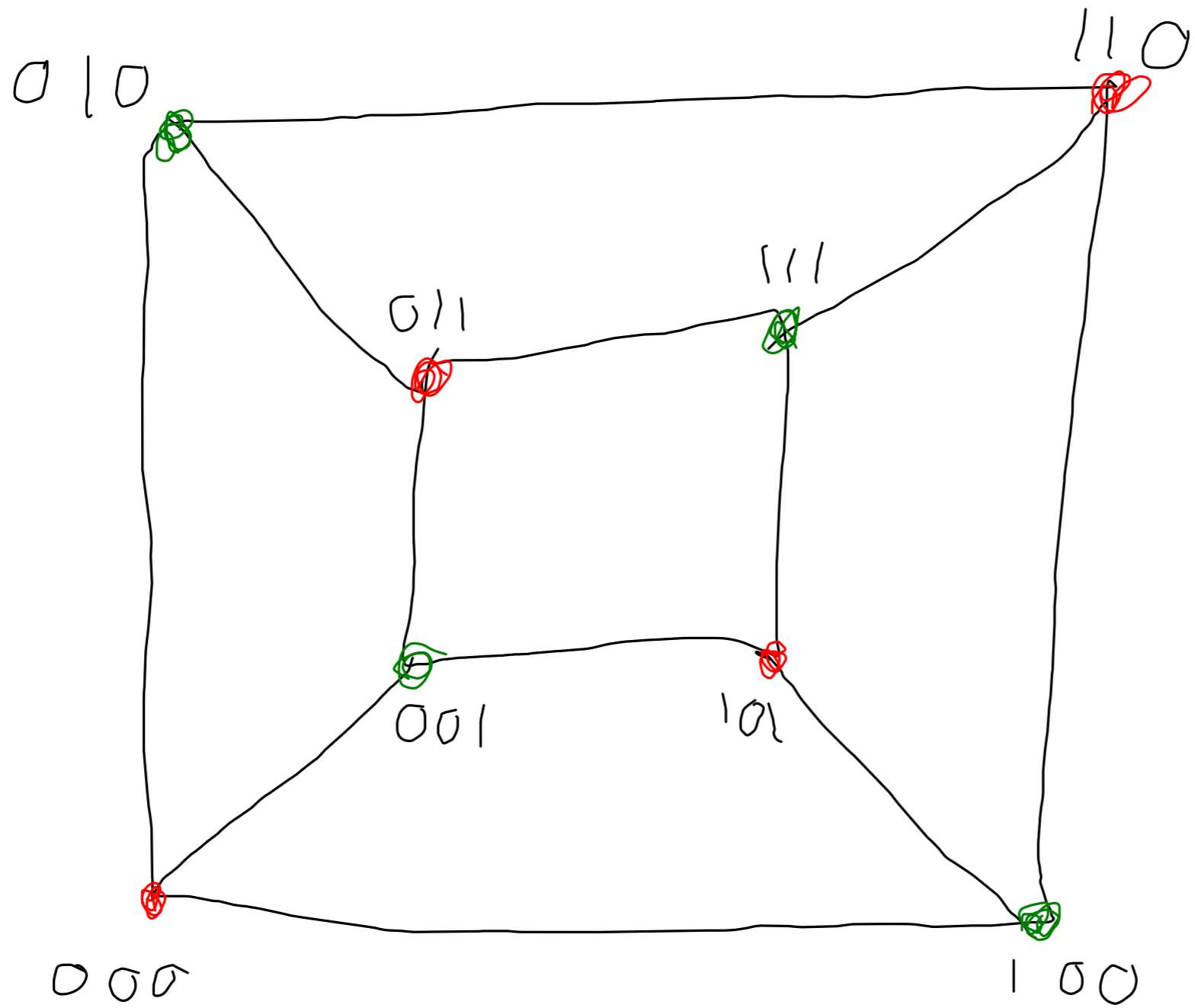
1-cube



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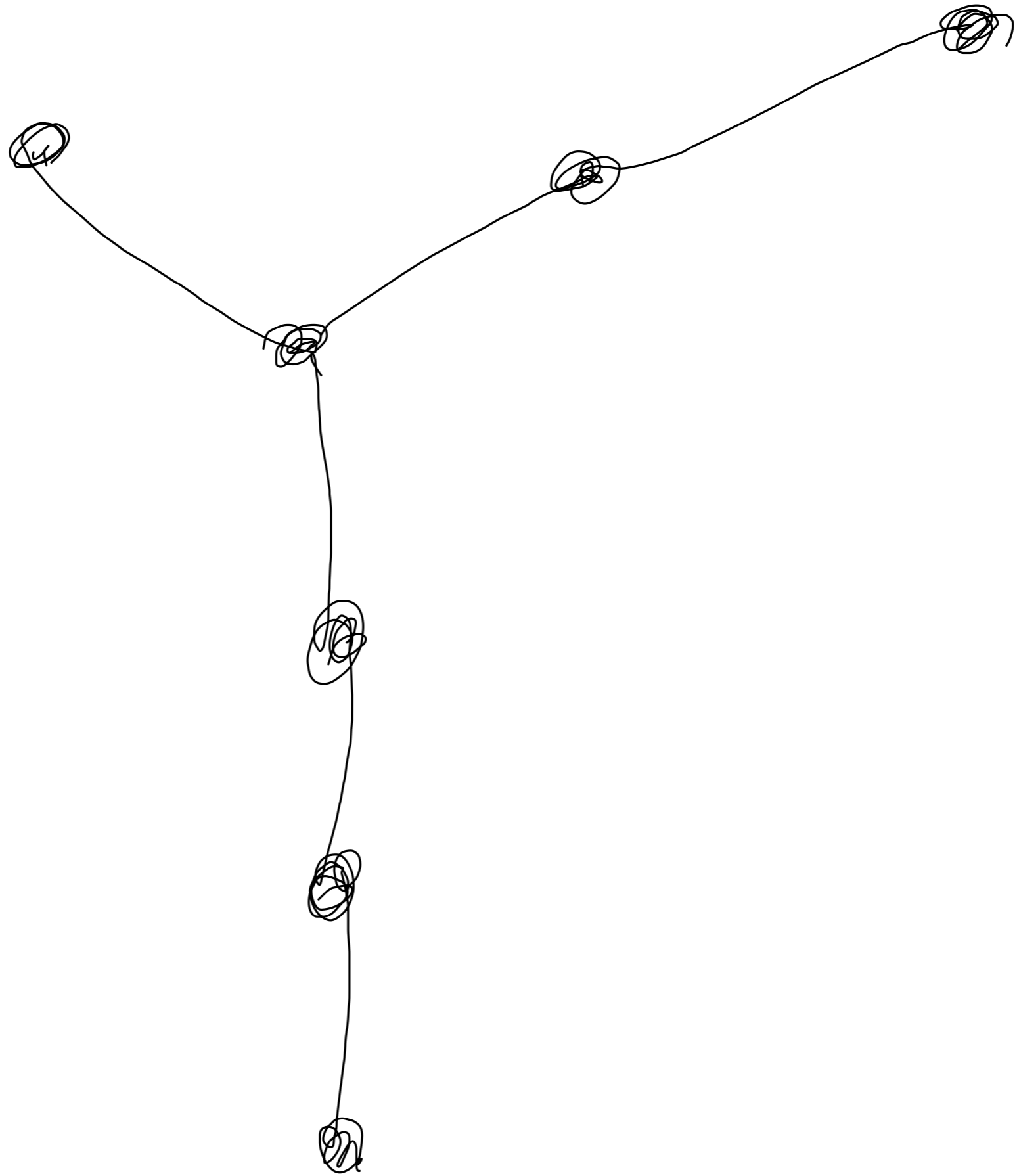
2-cube





$$X = \{000, 110, 101, 011\}$$

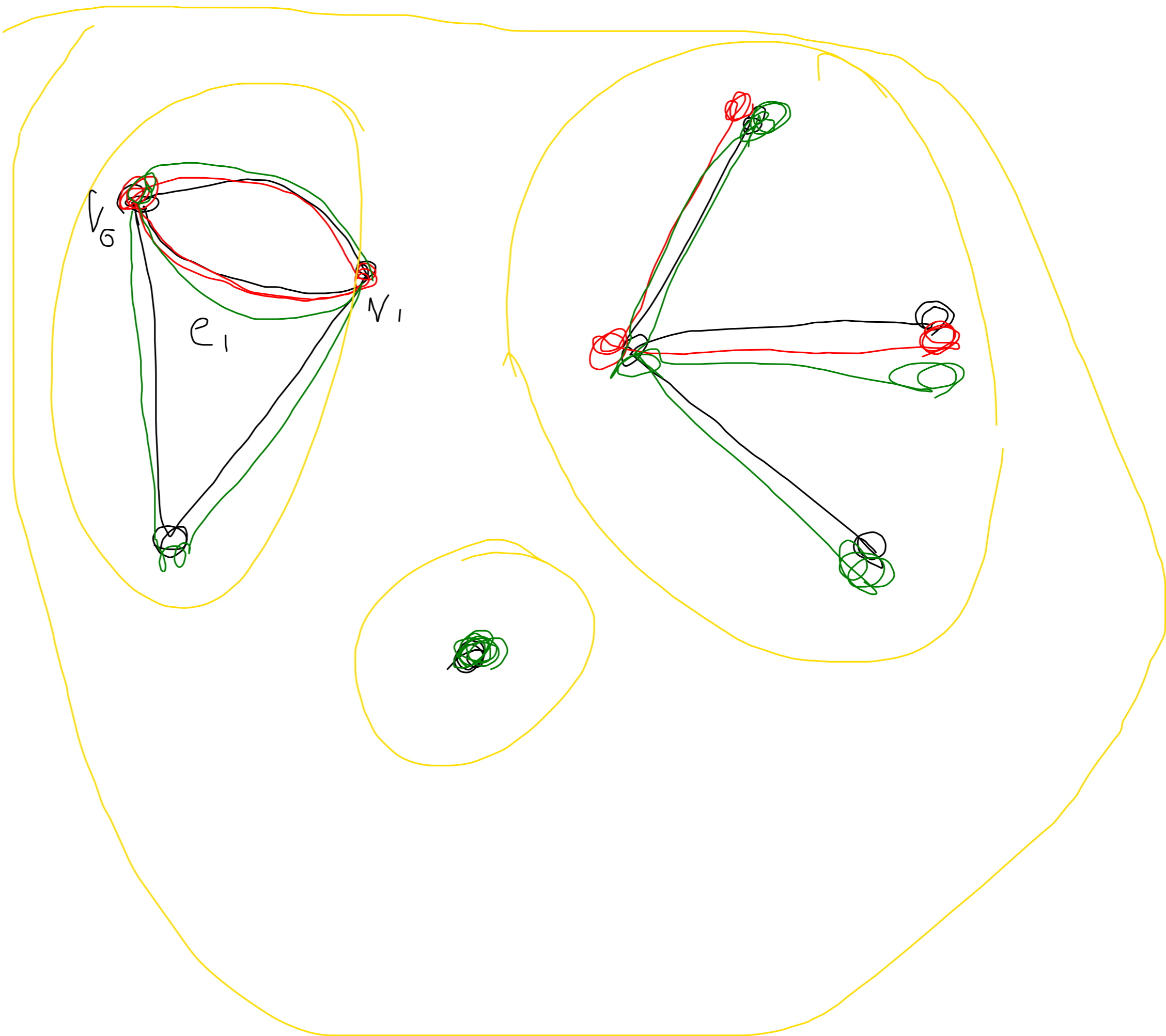
$$Y = \{001, 100, 010, 111\}$$

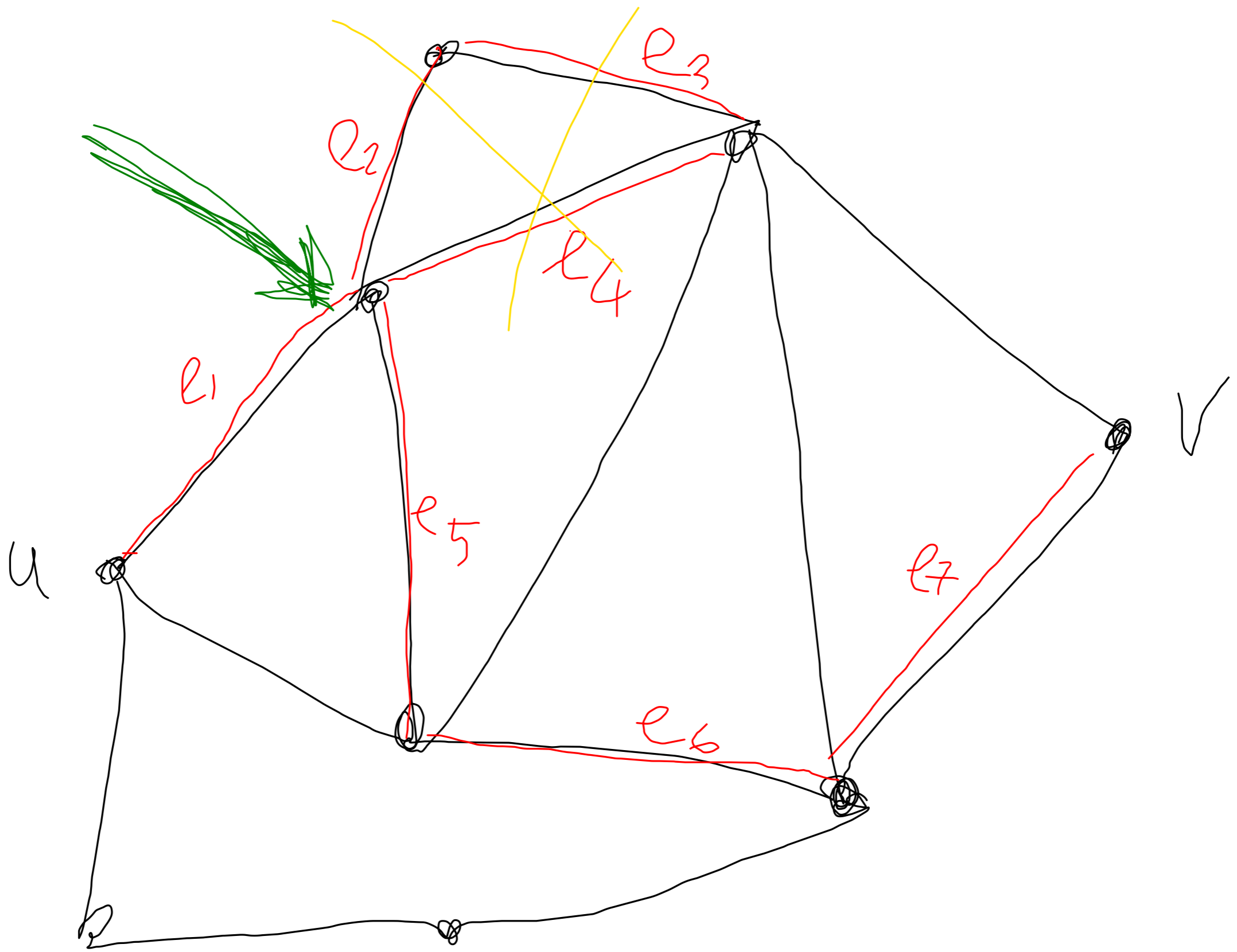


G

$$W = V_0$$

$$W = V_0 e_1 v_1$$





Let  $G$  be a graph with  $\delta \geq k$   
Then each vertex of  $G$  is  
the origin of at least one  
path of at least length  $k$ .

Metric Space  $\therefore$  pair

$(X, d)$  where  $d: X \times X \rightarrow \mathbb{R}$

so that  $\forall x, y, z \in X$

1)  $d(x, y) \geq 0$  and  $d(x, y) = 0 \iff x = y$

2)  $d(x, y) = d(y, x)$

3)  $d(x, z) \leq d(x, y) + d(y, z)$

$d$  is called  $\rightarrow$  distance

