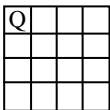
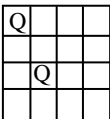


$$S_1 = \{1,2,3,4\}, S_2 = \{1,2,3,4\}, S_3 = \{1,2,3,4\}, S_4 = \{1,2,3,4\}$$



$$i_1 = 1,$$

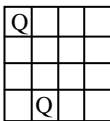
$$S_1 = \{2,3,4\}, S_2 = \{3,4\}, S_3 = \{2,4\}, S_4 = \{2,3\}$$



$$i_1 = 1, i_2 = 3,$$

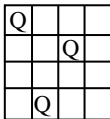
$$S_1 = \{2,3,4\}, S_2 = \{4\}, S_3 = \{\}, S_4 = \{2\} \quad \text{fail !}$$

$$S_3 = \{2,4\}, S_4 = \{2,3\}$$



$$i_1 = 1, i_2 = 4,$$

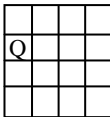
$$S_1 = \{2,3,4\}, S_2 = \{\}, S_3 = \{2\}, S_4 = \{3\}$$



$$i_1 = 1, i_2 = 4, i_3 = 2,$$

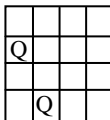
$$S_1 = \{2,3,4\}, S_2 = \{\}, S_3 = \{\}, S_4 = \{\} \quad \text{fail !}$$

$$S_2 = \{1,2,3,4\}, S_3 = \{1,2,3,4\}, S_4 = \{1,2,3,4\}$$



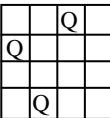
$$i_1 = 2,$$

$$S_1 = \{3,4\}, S_2 = \{4\}, S_3 = \{1,3\}, S_4 = \{1,3,4\}$$



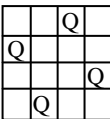
$$i_1 = 2, i_2 = 4,$$

$$S_1 = \{3,4\}, S_2 = \{\}, S_3 = \{1\}, S_4 = \{1,3\}$$



$$i_1 = 2, i_2 = 4, i_3 = 1,$$

$$S_1 = \{3,4\}, S_2 = \{\}, S_3 = \{\}, S_4 = \{3\}$$



$$i_1 = 2, i_2 = 4, i_3 = 1, i_4 = 3,$$

$$S_1 = \{3,4\}, S_2 = \{\}, S_3 = \{\}, S_4 = \{\}$$

Goal !