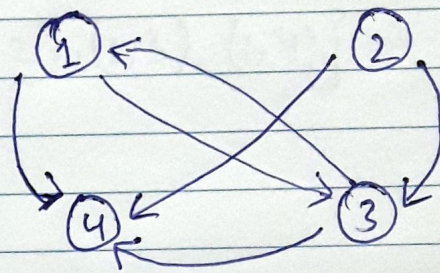


5- Irreflexive:

$$\forall a \in A, \forall (a, a) \notin R$$

$$R_1 = \{(1,3), (1,4), (2,3), (2,4), (3,1), (3,4)\}$$

	1	2	3	4
1	0	0	1	1
2	0	0	1	1
3	1	0	0	1
4	0	0	0	0



All diagonal have 0's

→ no loops

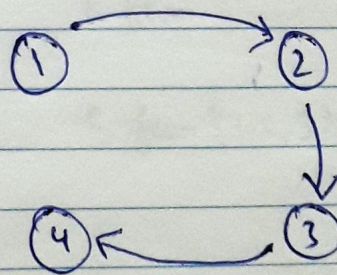
6- Asymmetric:

A

Asymmetric = Antisymmetric + Irreflexive

$$R = \{(1,2), (2,3), (3,4)\}$$

	1	2	3	4
1	0	1	0	0
2	0	0	1	0
3	0	0	0	1
4	0	0	0	0



No bidirectional link
No loop

All 0's in diagonal

$$M_{ij} \neq M_{ji} \quad i \neq j$$

$$0 \neq 1$$