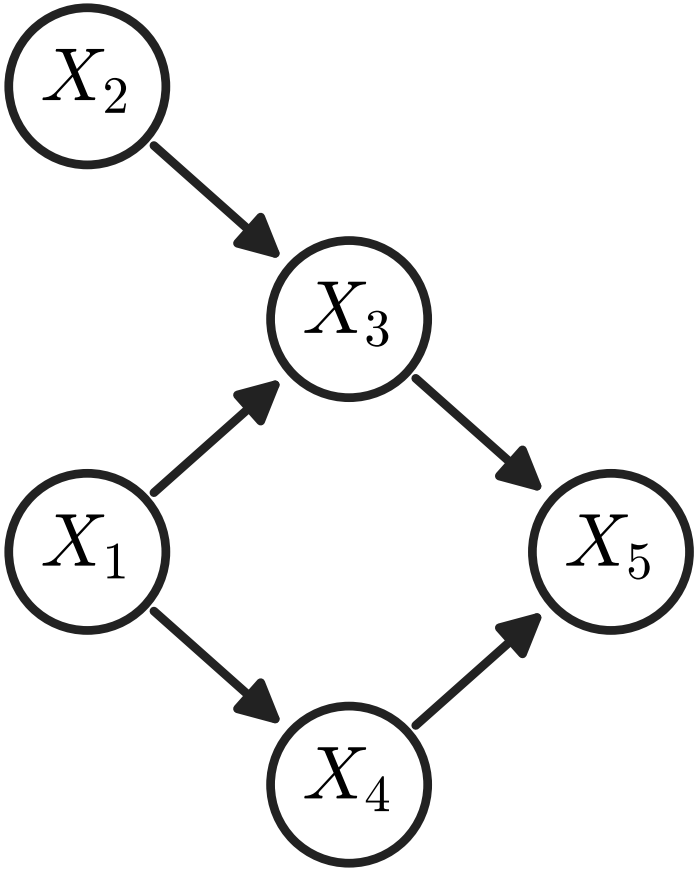


Markov condition:

$$X_1 \perp\!\!\!\perp X_2$$

$$X_2 \perp\!\!\!\perp \{X_1, X_4\}$$

$$X_3 \perp\!\!\!\perp X_4 \mid \{X_1, X_2\}$$

$$X_4 \perp\!\!\!\perp \{X_2, X_3\} \mid X_1$$

$$X_5 \perp\!\!\!\perp \{X_1, X_2\} \mid \{X_3, X_4\}$$

and, by d-separation:

$$\{X_4, X_5\} \perp\!\!\!\perp X_2 \mid \{X_1, X_3\}$$