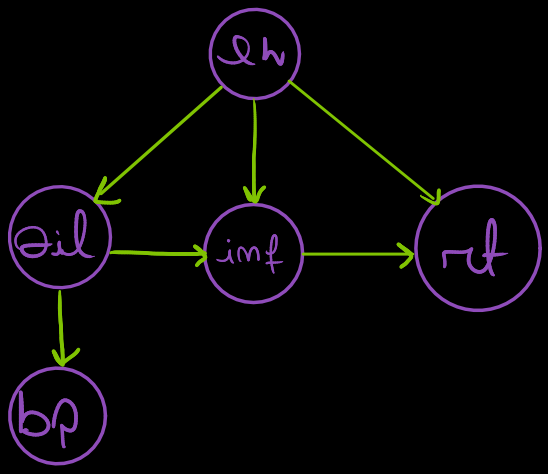
5.

P(eh=l)=0.2	
P (bp=l|oil=l)=0.9	P(bp=n|oil=l)=0.1
P(bp=l|oil=h)=0.1	P(bp=n|oil=h)=0.4
P(oil=l|eh=l)=0.9	P(oil=l|eh=h)=0.05
P(rt=l|inf=l,eh=l)=0.9	P(rt=l|inf=l,eh=h)=0.1
P(rt=l|inf=h,eh=l)=0.1	P(rt=l|inf=h,eh=h)=0.01
P(inf=l|oil=l, eh=l)=0.9	P(inf=l|oil=l, eh=h)=0.1
P(inf=l|oil=h, eh=l)=0.1	P(inf=l|oil=h, eh=h)=0.01

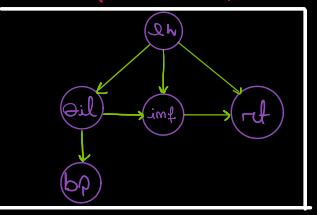


(a) oil influencia bp e inf
eh influencia oil, rt e inf
inf influencia rt

(c) $P(inf=h \mid bp=m, rt=h) = ?$

$$P(inf=h \mid bp=m, rt=h) = \frac{P(inf=h \mid eh, oil) \cdot P(bp=m \mid oil) \cdot P(rt=h \mid eh, inf=h)}{P(bp=m, rt=h)}$$

$$P(inf=h \mid eh, oil) = P(inf=h \mid eh=l, oil=l) \cdot P(eh=l) \cdot P(oil=l \mid eh=l)$$
$$+ P(inf=h \mid eh=h, oil=h) \cdot P(eh=h) \cdot P(oil=h \mid eh=h)$$
$$+ P(inf=h \mid eh=l, oil=h) \cdot P(eh=l) \cdot P(oil=h \mid eh=l)$$
$$+ P(inf=h \mid eh=h, oil=l) \cdot P(eh=h) \cdot P(oil=l \mid eh=h)$$



$$P(bp=m \mid oil) = P(bp=m \mid oil=l) \cdot [P(oil=l \mid eh=l) \cdot P(eh=l) + P(oil=l \mid eh=h) \cdot P(eh=h)]$$
$$+ P(bp=m \mid oil=h) \cdot [P(oil=h \mid eh=l) \cdot P(eh=l) + P(oil=h \mid eh=h) \cdot P(eh=l)]$$

$$P(rt=h \mid eh, inf=h) = P(rt=h \mid eh=l, inf=h)[P(inf=h \mid eh=l, oil=l) \cdot P(oil=l \mid eh=l) \cdot P(eh=l) +$$
$$P(inf=h \mid eh=l, oil=h) \cdot P(oil=h \mid eh=l) \cdot P(oil=h \mid eh=l) \cdot P(eh=l)] +$$
$$P(rt=h \mid eh=h, inf=h)[P(inf=h \mid eh=h, oil=l) \cdot P(oil=l \mid eh=h) \cdot P(eh=h) +$$
$$P(inf=h \mid eh=h, oil=h) \cdot P(oil=h \mid eh=h) \cdot P(eh=h)]$$

$$P(bp=m, rt=h) = P(bp=m \mid oil) \cdot P(rt=h \mid inf, eh)$$
$$= P(bp=m \mid oil) \cdot [P(rt=h \mid inf=l, eh=l) \cdot P(inf=l \mid eh=l, oil) \ldots$$