### 0.1 Bayesian Network Structure



### 0.2 Probability Assignments

$$
\begin{aligned}
& P\left(X_{0}=1\right)=0.5 \\
& P\left(X_{1}=1 \mid X_{0}=0\right)=0.5 \\
& P\left(X_{1}=1 \mid X_{0}=1\right)=0.5 \\
& P\left(X_{2}=1 \mid X_{0}=0, X_{1}=0\right)=0.1 \\
& P\left(X_{2}=1 \mid X_{0}=0, X_{1}=1\right)=0.2 \\
& P\left(X_{2}=1 \mid X_{0}=1, X_{1}=0\right)=0.3 \\
& P\left(X_{2}=1 \mid X_{0}=1, X_{1}=1\right)=0.15 \\
& P\left(X_{3}=1 \mid X_{1}=0\right)=0.99 \\
& P\left(X_{3}=1 \mid X_{1}=1\right)=0.01
\end{aligned}
$$

