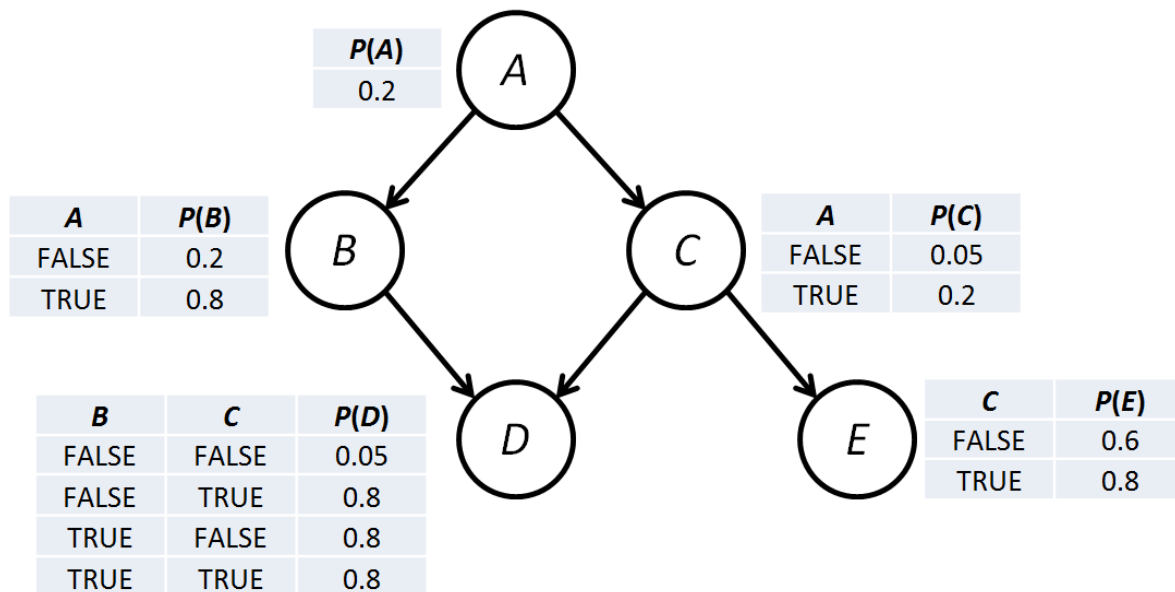


CENG 461: Artificial Intelligence
Homework #2
Bayesian Networks



For the given Bayesian Network, you are expected to implement a Python program to calculate $P(+D)$, $P(+D,-A)$, $P(+E|-B)$, $P(+A|+D,-E)$ and $P(+B,-E|+A)$ using:

1. Variable elimination (using the **pgmpy** package)
2. Monte Carlo technique (using your own sampling implementation)