CENG 461: Artificial Intelligence
Homework #2
Bayesian Networks

DUE DATE: 24.12.2018 - 23:55

A	P(B)
FALSE	0.2
TRUE	0.8

P(A)
0.2

A	P(C)
FALSE	0.05
TRUE	0.2

B	C	P(D)
FALSE	FALSE	0.05
FALSE	TRUE	0.8
TRUE	FALSE	0.8
TRUE	TRUE	0.8

C	P(E)
FALSE	0.6
TRUE	0.8
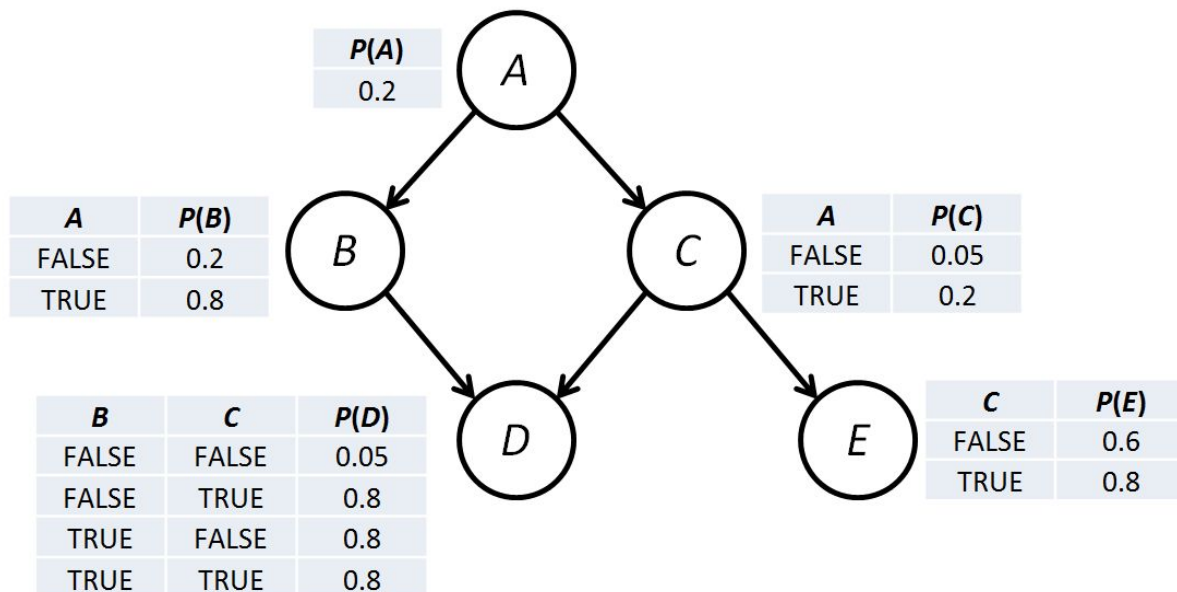
For the given Bayesian Network, calculate **P(+D)**, **P(+D,-A)**, **P(+E|-B)**, **P(+A|+D,-E)** and **P(+B,-E|+A)** using:

1. Complete enumeration
2. Variable elimination (if possible)
3. Monte Carlo technique

Submit your answers in Pdf and codes in Python.