CO3205 Intelligent Systems

Mini Project 01

Maximum Marks 100%

Develop a python programme calculate the probability values of the following Bayesian network given below.

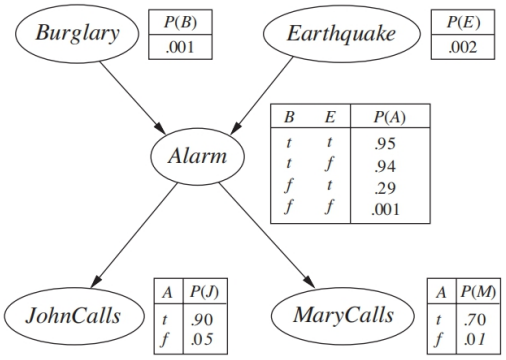

Figure 1: Bayesian Network

This image was extracted from the reference book 'Artificial Intelligence : A modern approach (3rd edition) by Russell & Novig'.

Develop a programme to calculate the conditional probabilities of the above given Bayes Network.

Example, The programme should be able to calculate P(MarryCalls | Burglary) when the term MarryCalls and Burglary are entered from the console mode.
It should also able to calculate P(MarryCalls|Alarm) correctly as well.

The first term can be Alarm, JohnCalls, and MarryCalls
Second term can be Alarm, Burglary, or Earthquake

Submission Guidelines:
Include all the python files to a single zip file and upload the zip file to LMS.
The zip file should be named according to the index number (eg. 17ENG777.zip).

Deadline : 7th July 2021, 2355H.
A three day grace period is provided but marks will be deducted due to late submission.