CECS 451
Assignment 11
Total: 20 Points

General Instruction

- Submit your work in the Dropbox folder via BeachBoard (Not email or in class).

1. (20 points) Implement a program to answer the query $\vec{P}(Rain|Sprinkler = true, WetGrass = true)$ in Figure 1 by using Gibbs sampling.

    i. Use `Python 3` and the name `gibbs.py`

    ii. Follow the specification

    - The program should take n value (# of total sampling) from `sys.argv`.
      ex) `python gibbs.py 1000000`
    - An expected output format. $(0 \leq p \leq 1)$
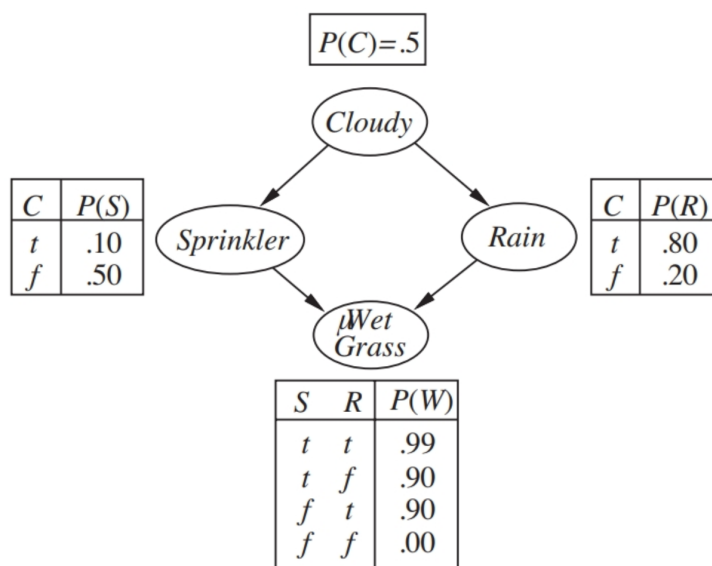   `<p,1-p>`

    iii. Submit your `gibbs.py`.

Figure 1: A multiply connected network with conditional probability tables