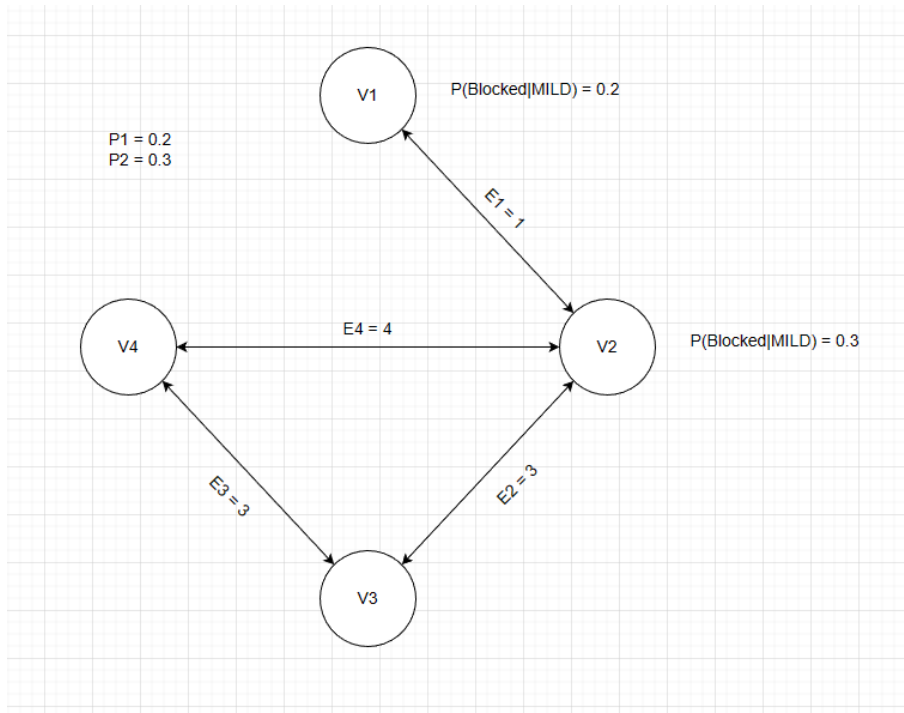


Execution example 1.

Same graph and P1 P2 values given in assignment guides

Graph:

Weather: Mild 0.1 , Stormy 0.4 , Extreme 0.5



Output:

WEATHER:

P(mild) = 0.1

P(stormy) = 0.4

P(extreme) = 0.5

VERTEX 1:

P(Blocked|Mild) = 0.2

P(Blocked|Stormy) = 0.4

P(Blocked|Extreme) = 0.6

P(Evacuees| Blockage2, not Blockage 1) = 0.8

P(Evacuees| not Blockage 2, Blockage1) = 0.7

P(Evacuees| Blockage2, Blockage1) = 0.94

P(Evacuees| not Blockage 2, not Blockage 1) = 0.0

VERTEX 2:

$$P(\text{Blocked} | \text{Mild}) = 0.3$$

$$P(\text{Blocked} | \text{Stormy}) = 0.6$$

$$P(\text{Blocked} | \text{Extreme}) = 0.9$$

$$P(\text{Evacuees} | \text{Blockage1, not Blockage 3, not Blockage 4, not Blockage 2}) = 0.8$$

$$P(\text{Evacuees} | \text{not Blockage 1, Blockage3, not Blockage 4, not Blockage 2}) = 0.4$$

$$P(\text{Evacuees} | \text{not Blockage 1, not Blockage 3, Blockage4, not Blockage 2}) = 0.2$$

$$P(\text{Evacuees} | \text{not Blockage 1, not Blockage 3, not Blockage 4, Blockage2}) = 0.7$$

$$P(\text{Evacuees} | \text{Blockage1, Blockage3, Blockage4, Blockage2}) = 0.97$$

$$P(\text{Evacuees} | \text{Blockage1, Blockage3, Blockage4, not Blockage 2}) = 0.9$$

$$P(\text{Evacuees} | \text{Blockage1, Blockage3, not Blockage 4, Blockage2}) = 0.96$$

$$P(\text{Evacuees} | \text{Blockage1, Blockage3, not Blockage 4, not Blockage 2}) = 0.88$$

$$P(\text{Evacuees} | \text{Blockage1, not Blockage 3, Blockage4, Blockage2}) = 0.95$$

$$P(\text{Evacuees} | \text{Blockage1, not Blockage 3, Blockage4, not Blockage 2}) = 0.84$$

$$P(\text{Evacuees} | \text{Blockage1, not Blockage 3, not Blockage 4, Blockage2}) = 0.94$$

$$P(\text{Evacuees} | \text{not Blockage 1, Blockage3, Blockage4, Blockage2}) = 0.86$$

$$P(\text{Evacuees} | \text{not Blockage 1, Blockage3, Blockage4, not Blockage 2}) = 0.52$$

$$P(\text{Evacuees} | \text{not Blockage 1, Blockage3, not Blockage 4, Blockage2}) = 0.82$$

$$P(\text{Evacuees} | \text{not Blockage 1, not Blockage 3, Blockage4, Blockage2}) = 0.76$$

$$P(\text{Evacuees} | \text{not Blockage 1, not Blockage 3, not Blockage 4, not Blockage 2}) = 0.0$$

VERTEX 3:

$$P(\text{Blocked} | \text{Mild}) = 0$$

$$P(\text{Blocked} | \text{Stormy}) = 0$$

$$P(\text{Blocked} | \text{Extreme}) = 0$$

$$P(\text{Evacuees} | \text{Blockage2, not Blockage 4, not Blockage 3}) = 0.4$$

$$P(\text{Evacuees} | \text{not Blockage 2, Blockage4, not Blockage 3}) = 0.4$$

$$P(\text{Evacuees} | \text{not Blockage 2, not Blockage 4, Blockage3}) = 0.7$$

$$P(\text{Evacuees} | \text{Blockage2, Blockage4, Blockage3}) = 0.89$$

$$P(\text{Evacuees} | \text{Blockage2, Blockage4, not Blockage 3}) = 0.64$$

$$P(\text{Evacuees} | \text{Blockage2, not Blockage 4, Blockage3}) = 0.82$$

$$P(\text{Evacuees} | \text{not Blockage 2, Blockage4, Blockage3}) = 0.82$$

$$P(\text{Evacuees} | \text{not Blockage 2, not Blockage 4, not Blockage 3}) = 0.0$$

VERTEX 4:

$$P(\text{Blocked} | \text{Mild}) = 0$$

$$P(\text{Blocked} | \text{Stormy}) = 0$$

$$P(\text{Blocked} | \text{Extreme}) = 0$$

$$P(\text{Evacuees} | \text{Blockage3, not Blockage 2, not Blockage 4}) = 0.4$$

$$P(\text{Evacuees} | \text{not Blockage 3, Blockage2, not Blockage 4}) = 0.2$$

$$P(\text{Evacuees} | \text{not Blockage 3, not Blockage 2, Blockage4}) = 0.7$$

$$P(\text{Evacuees} | \text{Blockage3, Blockage2, Blockage4}) = 0.86$$

$$P(\text{Evacuees} | \text{Blockage3, Blockage2, not Blockage 4}) = 0.52$$

$$P(\text{Evacuees} | \text{Blockage3, not Blockage 2, Blockage4}) = 0.82$$

$$P(\text{Evacuees} | \text{not Blockage 3, Blockage2, Blockage4}) = 0.76$$

$$P(\text{Evacuees} | \text{not Blockage 3, not Blockage 2, not Blockage 4}) = 0.0$$