

PMP - LAB3

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1 Ex4 Bonus: Calculați cele 2 probabilități folosind regula lui Bayes

I-Incendiu, C-cutremur, A-Alarma

Prima probabilitate(pct 2):

$$P(C = 1 \mid A = 1) = \frac{P(A = 1 \mid C = 1) \cdot P(C = 1)}{P(A = 1 \mid C = 1) \cdot P(C = 1) + P(A = 1 \mid C = 0) \cdot P(C = 0)} = \frac{x \cdot x}{y \cdot y}$$

$$P(A = 1 \mid C = 1) = P(A = 1 \mid C = 1, I = 1) \cdot P(I = 1) + P(A = 1 \mid C = 1, I = 0) \cdot P(I = 0) =$$

A doua probabilitate(pct3):

$$P(I = 1 \mid A = 0) = \frac{P(A = 0 \mid I = 1) \cdot P(I = 1)}{P(A = 0 \mid I = 1) \cdot P(I = 1) + P(A = 0 \mid I = 0) \cdot P(I = 0)} = \frac{x \cdot x}{y \cdot y}$$