# Tutorial 5

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**Compute P(Burglary|Alarm) using the AIPython program** [**probVE.py**](http://probve.py/)**. Answers to method calls such as bn4v.query(B,{A:True}) are in a list form [F,T] giving the probability that B is false and the probability that B is true, in conjunction with the list of conditions (here that A is true). The desired answer is then calculated by normalization. The Bayesian network is encoded as bn4 in** [**probGraphicalModels.py**](http://probgraphicalmodels.py/)**.**

We firstly import our variables we defined in probGraphicalModels.py.

A screenshot of a cell phone

Description automatically generated

And then, we make our query to calculate P(B|A) and P(-B|A) given A is true:

bn4v = VE(bn4)  
result = bn4v.query(B, {A: True})  
for key, value in result.items():  
 if key is False:  
 print("P(-Burglary|Alarm) is : ", value)  
 if key is True:  
 print("P(Burglary|Alarm) is : ", value)

finally, we get the results (normalization result):

A picture containing food, drawing

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