

function WALKSAT(*clauses*, *p*, *max_flips*) **returns** a satisfying model or *failure*

inputs: *clauses*, a set of clauses in propositional logic

p, the probability of choosing to do a “random walk” move, typically around 0.5

max_flips, number of value flips allowed before giving up

model \leftarrow a random assignment of *true/false* to the symbols in *clauses*

for each *i* = 1 **to** *max_flips* **do**

if *model* satisfies *clauses* **then return** *model*

clause \leftarrow a randomly selected clause from *clauses* that is false in *model*

if RANDOM(0, 1) $\leq p$ **then**

 flip the value in *model* of a randomly selected symbol from *clause*

else flip whichever symbol in *clause* maximizes the number of satisfied clauses

return *failure*