

We develop an efficient implementation of Davis-Putnam (DP) elimination, an algorithm for eliminating variables from a conjunctive normal form (CNF) formula. We use zero-suppressed binary decision diagram (ZBDD) for representing CNF formulas. Our focus is on evaluating the effect of minimising the formula during DP elimination by removing absorbed clauses. We also want to find a suitable heuristic for selecting the order of eliminated variables. Our motivation is compiling a CNF formula into a formula that is propagation-complete (PC). The formula can be encoded into decomposable negation normal form (DNNF), then back into CNF that contains auxiliary variables and implements domain consistency. Our program can be used to eliminate these auxiliary variables, thus obtaining a PC formula equivalent to the original formula.