To execute perograms based on unification and Resolution. Deduction is perolog is based on the unification and Instantiation. Matching Aums are unified and vacilables Example 1: In the believe puolog Proyesson, get Enstantiated unification and mustanticution take place after Querying Facts lebes (John, Bane) likes (Sane, 30hr) 9-likes (30hn, X) Dury: Here upon asking the Query first pudog in Start to search matching turns in puedicate with the auguements and It can match like (Sohn...) je writcation Then it lask from solve of x in Query and protoins answer X= jane. Example 2: At the perology query perompt, when

you below areay ? - Orions (x, las (6 mw)) = Bren (Y, Car(c)). Here overs (x, car(bMW)) and own (Y, car(c))

Prudicate names and same on both side Minhfill - leicause 8° J Number of arguements for that Prechicale

equal both side. itis 2 nd auguement with Predicate inside the levallets are same leath side and seen In that Predicate again number of augulments are same

But when you went ?- owns (x, ran (6 mw)) = dohns (y, ran (6)), then prolony werll evetuen false, Since it can not match owns: and likes; Resolution is one kind of Proof technique i) select two clauses that contain conflict teems (i) combine those two clauses and (ii) cancel own the conflicting terms. Of it is a Pleasant day you will do Standaroug Picking.
(2) It you are doing standary Picking Abave Statements can be written Prepositional logo like this -(1) standbury - Picking & Phasant (2) happy & standberry - Picking And again thus statements can be ENS this -(1) (Standbury-Picking V-Pleasant) 1 (2) Chappy v~ Stanbury-Picking) How? see the figure on eight. When we wente about new clave in infor our implies forem, not have It it is pleasant day you are happy. (a) Catawalowy - Picking V Standbury) (3) Pleasant V happy

Let's see an example At understand have Resolution and Refutation work Inbelow (rample part (I) supruseds the English meaning for clauses Pard (11) expussents the Perepositional LocyC, Part(111) supersents the CNF of part (11) and part (14) weant to perore userg Refutation Proof method. 1) If it is sunny and warm day you will enjoy. Part (1): English sentences. 2) If it is waren and pleasant may you well do 3) If it is eraining then no strubbeling picking. A 4 it & examing you well get week 5) It is warm bay 6) It is earning. 7) It is during ; Part(11): Propotional Loyic mod 2: You I enjoy & Sunny Awaren 2) Standeney-picking + warm A phasent 3) re standerery-picking & eraining. 4) wet < eraining 5) warm 6) marning 1) Sunny. Part (111): CNF 1) Cenjoy Vn sunny w warun) 2) Estanolucion - Packing V warm V- Pleasant) 1 3) (a standeroug-Picking v~ maining)1 4) (west V~ eraining)1 5) (waeum) 1 6) (examing) 1 1) (Sunny).

Part(IV): other statements wel want to perove by injutation (noal) you are not doing blanchewy picking Coroal 2) you will enjoy.
Coroal 3) Tony it yourself: You will exet weet;
Oroal 1: you are not doing standberry Dicking Assume Staubovy- Picking (negate the ejoaland add it to egreen clauss). Stanoberoup Picking (3) Crostantony- picking to Maining (b) Maining weathing (4) 24 B nearen Contradiction clays Goal 2: you will enjoy Assum: ~ enjoy (negoti the Goal and add it to phoor enjoy Green clause) (1) Cenjoy V ~ surry VN warm enjoy 6) wasur (Endurny Vancoum) warmy Heavent) A (7) Dunny 1) Central Mentionery many contradiction on (8 Me Emply clauses (4) 5) (we decom) 1

SOURCE CODE sof el not standary picking: - maining neet :- maining warm work son at not readile bysome fraction to defen the degree to printers esunny to pale of an probability wheel bert work or DUTPUT ? - nat stanoborous preking I eile = purgad C. bebreck but. 1999 Wa 381 X 215 X 3 784 8 William 8 mint solo grangery buy bressings of 182 I for al breaks temetate to exprange to the the work north a 2-0 perior mistered than a garan Inthood = bidg t than (Intp)? Throop (Tepras o'c pataverplan, 'scaled'), Lette ( Toput Toroge in crayscall') consent tunay to soulde prusion buta: the furth surfaceres benefit and supports couly singe peristen and exalle pricision, Throughour donners I eyeny to donch severy which He 8m 2 double function Is in educable (Tappay) Elton Emay sproteet RESULT: Thus unification and Resolution is implemented and executed successfully. IN = demos of (I, GM, A