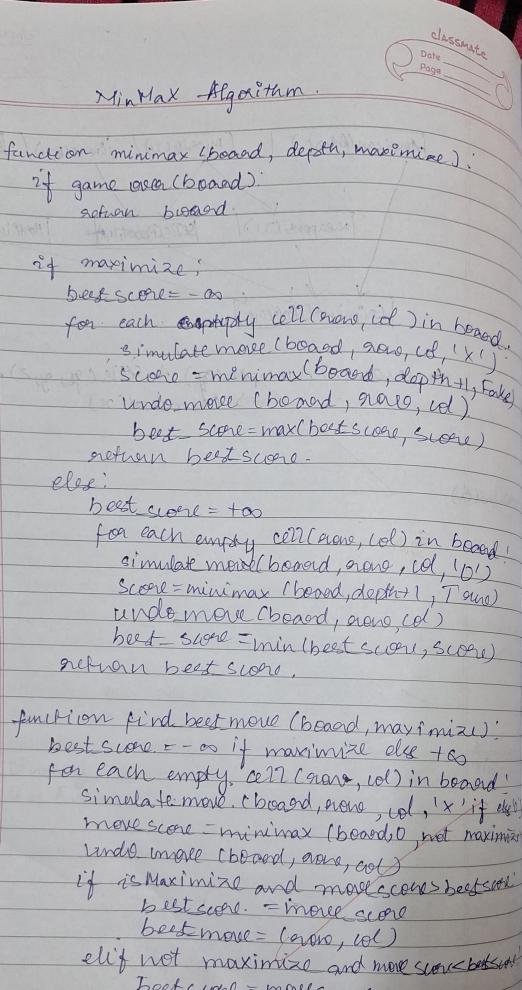
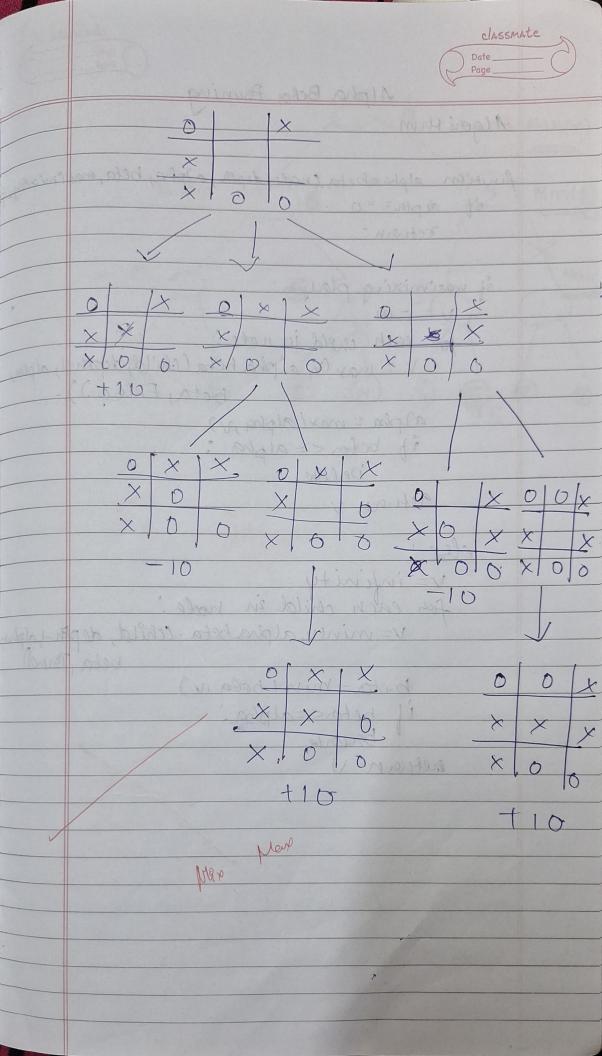
Forward Chaining 3/12/24 As per the ano, it is a coime for an American to sell neapons to nostile nations. Country A , an enemy of America, has some misseles, and all the missiles were sold to it by Robert, who is an American litèzen. Pagel - Robert is caminal 9ts a crême for an American to sell nocapons to hostile mations. American (n) A noeapons (y) A sells (n, y, Z). A Hosteleli Country A has some missills. In Opens (A, n) 1 Missilo (n). Robert is American American (Robert) All the missiles noeae sold to country A by Robert to Missile (n) 1 Onons (A, n) -> Scrrs (Robert, n,A). Missiles are neapons Micsile (n) => weapon(n) country A renemy of American Enemy (A, America tnemy of America is known as hostile +n Enemy On, America) => Hostile (n) To pure coincinal (Robert)

Misse(T)) / Prons(A,TI) / EnemyCA Amoria) -American (Robert) HOSTELE (A) Sells (Robert, 71, 4) Neapons (TI) Carminal (Robert) American(n) 1 weapon(ay) 1 selle (q, y, Z) 1 Hostile (2) Scriminal (2)



24 game over (board): sofren broard. if maximize; for each compressly cell (evene, id) in board 3 imulate more (board, novo, cd, 1x1 5 cone = minimax (board, dopth + take) undo more (board, nove, id) best score= max(bosts were, score) return best scorebest sione = too for each empty cell (agne, (ol) in board simulate more (board, nono, col, 101) Scorl=minimax (bood, deptho) Toure) undo more (board, ago, col) beet_ swere = min (best swere, swere) nefron best score function find beet more (board, maximize); best sione = - or if maximize else + or for each empty cell (none, col) in board; Simulate move. Choand, none, col, 1x'if else move score - minimax (board, o not maximize unde made (board, aous, col) if is Maximize and most scores bestsool best score = more score beet move = (anono, col) elly not maximize and more score butsut. Best such = morelscore boot more = (none, col) orlforn best moral

MinMax Algorithm



Alpha Beta Pauning Algori Hnm. function alpha = beta (node, depth, alpha, beta, maximizely if maximizing player. for each cheld in node: V = max (V, alpha beta (child, depth-1, alpha) beta, Falso)) alpha = max (alpha, v) if befor <= alpha V= infinity for each child in node: V= mincu, alphabeta child, depth-lapha beta Tornel beta=min(beta,v) if betar-alphai bareare Interen V

