```
LAB (5
                              (22/10/24)
   smoulation of Annealing
                                         Aros mes I making sats
    Objectus Pan: 22+22112
   Step): defor fundron called smeddron Amealog
          del simulation annealing (nitral state, introllery, coolingstate, i)
                Current = initralstate
                 best & current
                 best & objective (wment)
                 temp - whatemp
                 while temp >1:
                     for it hoit:
                         new = neighbour (wment)
                                                 P.O. 3 Hoyenlous
                         wr = object ve (current)
                       now cost = object (new)
           (Cur, new-cast, temp) - Renge lo, 1):
                               current = "new will a tradeport atorago"
                         If new < best:
                                          cooleged , Horoson)
                        temp = why ( (10) + 100 ( 10) + 100) + 100 ( 100) + 100 ( 10) + 100 ( 10) + 100 ( 10)
                Suhm (Lat, best wit)
 3/2: how define is objectivo function to change the state
                                                      Whom
        def. objects (state):
       for ele in stale:
                   cost + = ele +3m (ele)
                                      3988 0-1 1-0282 tr 1-0 38896,
             grehrn cost
step 3: next function is to del leave for neighbour, sill
      del neighbour (snake):
              new = grove, copy()
              ind = Kad (0, cur(chate) = 1))
             new [md) + = Kard (-1,1)
              giehm new
```

Shep 4. a fen for acceptance probability de fureha (cur-cost, new-cost, temp) if (now-cost < curr cost): LAR exclumit modeliances bolles more not may make Hill elle: elle : (nou eost - cumut ont) 00 best & objective (winers) tout a suffering. Code : the identity of the del moin (): inimal Temp = 600 new = neighbour (wrent) woling Rate 20.9 wix = object ne (overent) inivalsmete = [ed uniform (av. a) foir - mongelis] iteration 2 600 beststett, begrost = Smulation amolog (mhollrate, mhobit cooligeale, therefron) print ("Best State: ", best State)

print ("Best Cost: ", best fort) Suhm (Lat, but with) name - 22 "_ moint- no d'adhard antiologo et unter med: of opierus (siste): Ber role: [-058671, -0-39996, -051576, -030521, -0452504] toos envelore Best ast: -1.1276 Floren ich was stable of si address tron del resphon(state): New = grove, copy () inol . Kad (O, com (grote) . 1)) New [373] + = Kord (-1,1) somm new