Eq : 6 21/8/24. PRINCTICAL-6. nim: write a program to implement- 200091 detection and convection using hamming code concycl. Make a best run to injust dates stream and very over connection feature PROGRAM: def lent-lo-linary (lent) return 'i.join format (ord (char), '08b') for char in lent/ def calchdundant-Bits (m): 7 1000 for i in romge (m):) if 2 th is >= m + it light mounter relim i: (not note) nover de la la portredundant Bils (data, 8): $j = \emptyset$. (ker) spring m m=len (data) 2 200 for i'm (range (1,m+x+1): 设言=生血**少小

get = 1900 + 29/ - MAR

```
else:
          901 = xel + dala [-1 or h].
           R421
    scelven see [::- Jh
    calcParilyBile (aver, 2)!
     n = len (avr). (10)

for c in range (x):
          gor jin seange (1, n+1):
           (2**i) == (2**i);
            val = val 1 int (aver [-1 + j])
    agur = agor [:n - (2 + + i)] + ler (val)+
          200 (n - (2 * * i) +1 = ]
    return aron, + 1 + 111 = < 5 * + 5
del delect Exxor (avr, wr): i mules
      n = len (aux) 2) with Land mubiting
     for i in range (no):
        for j in kange (1, n+1):
          1 12 (2++i) == (2++i).
             val = val ~ int (avor [-1 + j ])
         ner = ner + val + (10 + + i)
          reburn int (Als (see), 2)
```

des convect Esver (succived data, esveron, position). solven exceived data datal list = list (received - data) everon_inden = len (received_data) - oeron-parific convicted_Dit = 01. if data lut [everon_index] ==1 else, data-list [everor_index]== corrected-bit def main ():

word = injul- ("Enler a word to be Louis (" - The poulting ") or hard lanary-data = lent_to_ linary (word). jount (f'Binary representation of 'Ewordy'is ? linary data?"). m= len (linary_data). - 200000 / r = calchedundant Rits (m) over = por Redundant Bits (Dinovy-data, 8). avoir = calc Parily Tils (avor, 8). pount ("Data bransferred is "+ avor). succised - data = injut ("Enter the succeived data (with possible everous): ")

y not all (but in '01' gov bit in received) pount ("Invalid input! lociced data
Abould be a binary Assing."). correction = detect Grecon (received - data). of correction == 0: print ("There is no over in the seceived") elre: corraded_data = correct-Erenon (received_data) coronation) warmy coronation) print ("The position of Leveron in len (received data) - coroudionet, "from the left") point ("consided data vint consided data) J-name -== "-(main--: main () (m) abor landenship is of the words Use history/was work in (6 July) W. M. Marile Van Diss (1750 to a hundred which bolist) / wife idollhousson all relight town a play have Circle School (Charles School)

COTPUT: Enter a word to be transmitted: heli Rinary representation of heli is 01101000011001010110 10001101001. Data transferred is 0110101000 11001010110111000 Entor received data (with possible esorons) 011010100111001010101101110001100100 The possition of everoff is to from the left consucted data 401101010100011001010110111000 1100 (001(10-MANGERS MANDE - INDIANX - ON LICEN ROOM del nomber (woundous his municipal JEGWULL = [messogs [C: E+1] fox i num fromer to less (fromes hamming code is succentible