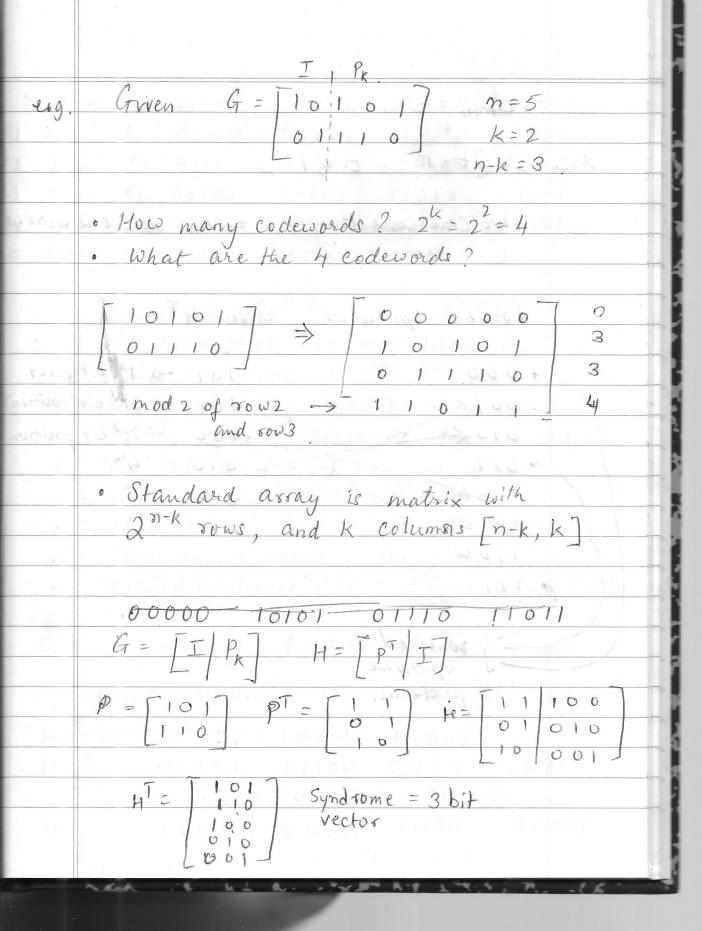
Stop & wait, go-back-N, -- Soluto moin assist chambles your solves maximum Likelihood! Shamon Pano -Z(n,h) co-LBC about 20012 2n 2 2k = messages =) 2k code words But kbit message conveiled to n bit code 20 Each codeword is n bits long Le have 2ⁿ possible patterns 2k valid codewords 2n-2k error words (also called undetectable essoss) (also called dete etable erross · Grien Decoding neing a standard array, · Given G 00 H, we contruct a stendard array using the following Sleps.



2
Amin = 3
Service of the servic
dmin > 2t+1 t <1
: We can correct up to 1 error, detect 2 errors
1 - What chi the Headechords ?
Possille and Control
Possible syndromes Given HT
101 -> 1st bit error
001 (position)
010 < 100 -33rd bit position
010 4th
100t
I A RIKEWIND X KUD 25005 A-10 C
1104
111
1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
syndrome
not de la companya del companya de la companya del companya de la
The state of the s
The troop of the second of the
tids = 9 morbay2 on 3 14
1 100

```
Syndrome Co = 00000 10101 01110 11011
     e, $0000 00101 11110 61011
 101
 110 02=01000 011101 00110 10011
 100 eg=00100 [000] 01010 [1111]
010. ey=00010 [0111] 01100 [100]
 DOI eg= 00001 10100 01111 11010.
      Since n < 2n-k (5 < 25-2)
      all syndromes are not used by
      single bit errors.
      The remaining syndromes 011 and 111
      can be used to represent two bit errors.
      All the 24 (6x4) patterns above
      are used by single bit errors.
We still have 2^5 - 24 = 32 - 24 = 8 patterns
      How do we assign these patterns?
       Unused syndrome 011 = 010 ( 001 = S4 ( S5
   Ô
           00011 $ 0$ 10 00011 11000
  011
      un used syndrome 111 = 110(A 001 = 82 (B S5
          00111 10010 01001
  H
           61,001 11100 00111 10010
  111
         OY 111 = 101 ( ) 010 = SI ( ) S4
           10010 001,11 11100 01001
   111
```

If the received vector is 00110
Coset leader 010000 month
Correct codeword 01110.
100 - 1111 - 01010 - 10001 - 1111 1
10044= COOTING STATE 1 - 204000, 4855 5 - 900
0010 01010 00101 0000 0000 0000
78-2- 31 1-0- 7-0-
* Sunce 40 002 1/2 63 < 22/2 / 4
all syndromes are not used by
The first of the form of the first of the fi
The Theorem Sunavana Character of the Comment of the
or except to surface the same of the control of the
The story of it stories I go all on the
· 40 Still Lane 25 - 26 = 37 James C. Here
· How do we cosign the protocut
* MUNICIO ESTUDIO - 110 BICOLO PORNIED .
211 00011 tot 10 00 11000 115
11 = 100 A 100 = 101 = 110 ON 10 P 100 = 100 ON 100
1-9-10-01-01-11-00-11
11 61661 11100 60111 10010
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