

# Assignment No:02

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# Step 1

- ◇ Firstly we assign ASCII code to particular alphabet of msg
- ◇ Lets suppose Message = “HELLO”
- ◇ Assign ASCII value

Like

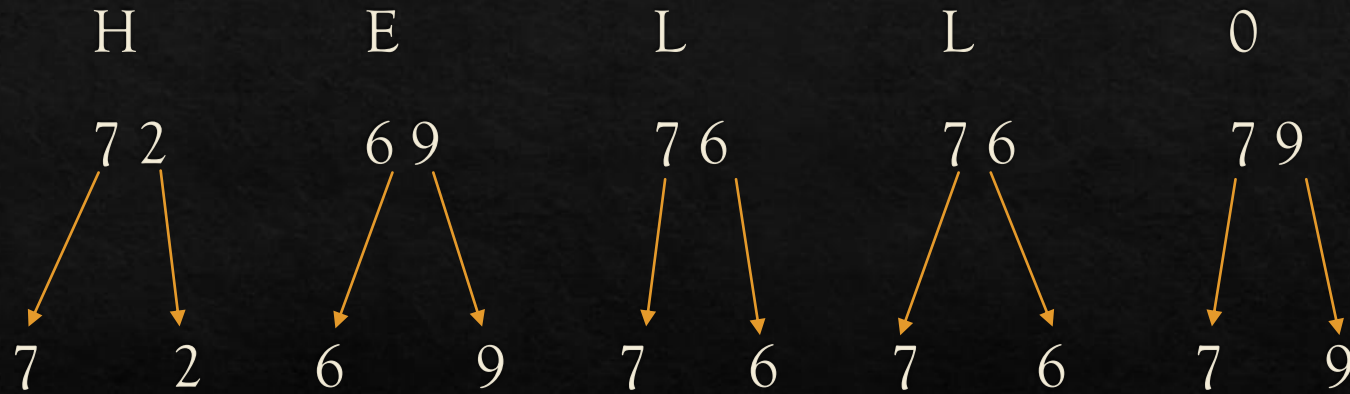
H = 72      E = 69      L = 76      L = 76      O = 79

Decimal	ASCII Character	Decimal	ASCII Character
65	A	78	N
66	B	79	O
67	C	80	P
68	D	81	Q
69	E	82	R
70	F	83	S
71	G	84	T
72	H	85	U
73	I	86	V
74	J	87	W
75	K	88	X
76	L	89	Y
77	M	90	Z

# Step 2

◇ Now break these ASCII value into 2 parts

Value = " H = 72      E = 69      L = 76      L = 76      0 = 79 "



Add 30 in each number

So number = 37 , 32 , 36, 39, 37, 36, 37, 36, 37, 39

# Step 3

Number = 37 , 32 , 36, 39, 37, 36, 37, 36, 37,  
39

Add length of the key

Here our keyword is “HELLO”

SO, length is = 5 , add 5

Now these number becomes

New Number =

42,37,41,44,42,41,42,41,42,44



# Step 4

New Number =42,37,41,44,42,41,42,41,42,44

Takes number 1 by 1 and create a 4 x 4 matrix which is shown in the table

Here our 1<sup>st</sup> num is = 47

So, plot the 4 X 4 just like that after plotting its horizontal addition or vertical addition is equal to 47

Raw1 = {27,1,12,7}

Raw2 ={11,8,19,2}

Raw3 ={5,10,3,29}

Raw4 ={4,28,6,9}

27	1	12	7	=47
11	8	26	2	=47
5	10	3	29	=47
4	28	6	9	=47
=47	=47	=47	=47	

# Mixed column

Row1 = {27,1,12,7}

Row2 = {11,8,19,2}

Row3 = {5,10,3,29}

Row4 = {4,28,6,9}

Select 1 value in every column

Selecting

Row1 = index [0]

Row2 = index [2]

Row3 = index [3]

Row4 = index [1]

- ◆ After that combine the values and display the output
- ◆ For decryption use these steps in recursive way so you can find your desired plane text.

Remind me in your precious prayers  
Thank you