Command Window

```
Enter the number of symbols :2
The number of symbols are N
     1     2

eneter probabability[0.8,0.2]
The first Probability are :
    0.8000    0.2000

The second Probability are :
    0.8000    0.2000

Avg length of code
     1

Entropy is
    0.7219

bits/msg
Efficiency is :
   72.1928

Codeword are
     0     1

decoded output is
     1     2

fx >>
```

Command Window

```
msg =

     1     1     0     0     1     0


decoded =

     1     1     0     0     1     0

fx >>
```

Command Window

```
G =

     1     0     0     0     1     1     1
     0     1     0     0     1     1     0
     0     0     1     0     1     0     1
     0     0     0     1     0     1     1


m =

     0     1     1     0
     0     1     0     1
     1     0     0     1


code_vector =

     0     1     1     0     0     1     1
     0     1     0     1     1     0     1
     1     0     0     1     1     0     0

fx >>
```

Command Window

```
Code_vector =

     0     0     0     0     0     0     0
     0     0     0     1     1     1     1
     0     0     1     0     1     0     1
     0     0     1     1     0     1     0
     0     1     0     0     0     1     1
     0     1     0     1     1     0     0
     0     1     1     0     1     1     0
     0     1     1     1     0     0     1
     1     0     0     0     1     1     0
     1     0     0     1     0     0     1
     1     0     1     0     0     1     1
     1     0     1     1     1     0     0
     1     1     0     0     1     0     1
     1     1     0     1     0     1     0
     1     1     1     0     0     0     0
     1     1     1     1     1     1     1

fx >>
```

Command Window

```
Enter codeword length7
Enter No of msg bits4
Enter Generator Polynomial[1 1 0 1]
Message Bits
0000
0001
0010
0011
0100
0101
0110
0111
1000
1001
1010
1011
1100
1101
1110
1111
Generator Matrix
     1     0     0     0     1     1     0
     0     1     0     0     0     1     1
     0     0     1     0     1     1     1
     0     0     0     1     1     0     1
```

CodeWords

0	0	0	0	0	0	0
0	0	0	1	1	0	1
0	0	1	0	1	1	1
0	0	1	1	0	1	0
0	1	0	0	0	1	1
0	1	0	1	1	1	0
0	1	1	0	1	0	0
0	1	1	1	0	0	1
1	0	0	0	1	1	0
1	0	0	1	0	1	1
1	0	1	0	0	0	1
1	0	1	1	1	0	0
1	1	0	0	1	0	1
1	1	0	1	0	0	0
1	1	1	0	0	1	0
1	1	1	1	1	1	1