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 1: #!/afs/cats.ucsc.edu/courses/cse112-wm/usr/smalltalk/bin/gst -f
 2: "$Id: bitstream.st,v 1.2 2020-01-31 17:05:02-08 - - $"
 3: execname := '$RCSfile: bitstream.st,v $' =~ '.*: (.*),v.*' at: 1.
 4:
 5: Character extend [
 6:    isGraph [
 7:       ^ (Character space < self) & (self <= $~)
 8:    ]
 9:    visible [
10:       self isGraph ifTrue: [^ '$', self asString]
11:                    ifFalse: [^ self asInteger printStringRadix: 16]
12:    ]
13: ]
14:
15: Object subclass: BitStream [
16:    |bitIndex byte myStream|
17:    BitStream class >> new: fileStream [
18:       |result|
19:       result := super new.
20:       result init: fileStream.
21:       ^result
22:    ]
23:    init: fileStream [
24:       myStream := fileStream.
25:       bitIndex := 1.
26:    ]
27:    nextBit [
28:       bitIndex = 1 ifTrue: [
29:          byte := myStream next.
30:          bitIndex := 9.
31:       ].
32:       bitIndex := bitIndex - 1.
33:       ^byte value bitAt: bitIndex
34:    ]
35:    atEnd [
36:       ^bitIndex = 1 and: [myStream atEnd]
37:    ]
38:    currByte [
39:       ^byte
40:    ]
41: ]
42:
43: nl := Character nl.
44: stdinBits := BitStream new: stdin.
45: count := 0.
46: [stdinBits atEnd] whileFalse: [
47:    stdout << stdinBits nextBit.
48:    count := count + 1.
49:    count = 4 ifTrue: [stdout << ' '].
50:    count = 8 ifTrue: [
51:       stdout << ' ' << stdinBits currByte visible << nl.
52:       count := 0
53:    ].
54: ]
55:
56: "TEST: echo hello world | ./bitstream.st 2>&1"
57:
```

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 1: ::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
 2: mkst.perl: echo hello world | ./bitstream.st 2>&1
 3: ::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
 4: 0110 1000 $h
 5: 0110 0101 $e
 6: 0110 1100 $l
 7: 0110 1100 $l
 8: 0110 1111 $o
 9: 0010 0000 16r20
10: 0111 0111 $w
11: 0110 1111 $o
12: 0111 0010 $r
13: 0110 1100 $l
14: 0110 0100 $d
15: 0000 1010 16rA
16: ::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
17: Exit status 0
```