

```
1: #!/afs/cats.ucsc.edu/courses/cmps112-wm/usr/smalltalk/bin/gst -f
2: "$Id: extendstream.st,v 1.1 2019-02-01 14:36:25-08 - - $"
3:
4: FileStream extend [
5:     |bitIndex currentChar|
6:
7:     nextBit [
8:         |bit|
9:         bitIndex isNil ifTrue: [bitIndex := 0].
10:        bitIndex = 0 ifTrue: [
11:            bitIndex := 8.
12:            currentChar := self next.
13:        ].
14:        bit := currentChar value bitAt: bitIndex.
15:        bitIndex := bitIndex - 1.
16:        ^ bit
17:    ]
18:
19:    atBitEnd [
20:        ^ (bitIndex isNil | (bitIndex = 0)) & self atEnd
21:    ]
22:
23: ]
24:
25: nl := Character nl.
26: count := 0.
27: [stdin atBitEnd not] whileTrue: [
28:     stdout << stdin nextBit.
29:     count := count + 1.
30:     count = 4 ifTrue: [stdout << ' '].
31:     count = 8 ifTrue: [stdout << nl. count := 0].
32: ]
33:
34: "TEST: echo Hello World | extendstream.st"
35:
```

```
1: ::::::::::::::::::::::::::::::
2: mkst: echo Hello World | extendstream.st
3: ::::::::::::::::::::::::::::::
4: 0100 1000
5: 0110 0101
6: 0110 1100
7: 0110 1100
8: 0110 1111
9: 0010 0000
10: 0101 0111
11: 0110 1111
12: 0111 0010
13: 0110 1100
14: 0110 0100
15: 0000 1010
16: :::::::::::Exit status 0
```