

```
1: #!/afs/cats.ucsc.edu/courses/cse112-wm/usr/smalltalk/bin/gst -f
2: "$Id: extendstream.st,v 1.2 2020-01-31 17:05:02-08 - - $"
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.perl: 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: .....
17: Exit status 0

```