

```
1: #!/afs/cats.ucsc.edu/courses/cmps112-wm/usr/smalltalk/bin/gst -f
2: "$Id: collatz.st,v 1.2 2012-02-23 18:57:47-08 - - $"
3: "http://en.wikipedia.org/wiki/Collatz_conjecture"
4:
5: Object subclass: Collatz [
6:   Collatz class >> compute: value [
7:     |n count|
8:     n := value.
9:     count := 0.
10:    [n > 1] whileTrue: [
11:      stdout << count << ': ' << n << Character nl.
12:      count := count + 1.
13:      n even ifTrue: [n := n / 2]
14:        ifFalse: [n := n * 3 + 1].
15:    ].
16:    stdout << count << ': ' << n << Character nl.
17:  ]
18: ]
19:
20: Collatz compute: (Smalltalk arguments at: 1) asInteger.
21:
22: "TEST: collatz.st 15"
23:
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```
1: ****mks**** collatz.st 15 2>&1
2: 0: 15
3: 1: 46
4: 2: 23
5: 3: 70
6: 4: 35
7: 5: 106
8: 6: 53
9: 7: 160
10: 8: 80
11: 9: 40
12: 10: 20
13: 11: 10
14: 12: 5
15: 13: 16
16: 14: 8
17: 15: 4
18: 16: 2
19: 17: 1
20: ****status: 0x0000
21:
```