

Reverse (input might be empty)

1, \*, 2, \*, >  
2, 0, 2, 0, >  
2, 1, 2, 1, >  
2, \_, 3, \_, <  
3, 0, 4, x, >  
3, 1, 5, x, >  
3, x, 3, x, <  
4, 0, 4, 0, >  
4, 1, 4, 1, >  
4, x, 4, x, >  
4, \_, 6, 0, <  
5, 0, 5, 0, >  
5, 1, 5, 1, >  
5, x, 5, x, >  
5, \_, 7, 1, <  
6, 0, 6, 0, <  
6, 1, 6, 1, <  
6, x, 3, x, <  
7, 0, 7, 0, <  
7, 1, 7, 1, <  
7, x, 3, x, <  
8, \*, 8, \*, >  
8, x, 8, \_, >  
8, 0, 9, 0, <  
8, 1, 9, 1, <  
8, \_, 9, \_, <  
9, \_, 9, \_, <  
9, \*, H, \*

Flip bits (input might be empty)

1, \*, 1, \*, >  
1, 1, 1, 0, >  
1, 0, 1, 1, >  
1, \_, 2, \_, <  
2, 0, 2, 0, <  
2, 1, 2, 1, <  
2, \*, 3, \*, >  
3, 0, H, 0, <  
3, 1, H, 1, <  
3, \_, H, \_, <

Erase and leave "1" on tape if only "1"s appear in input;  
"0" otherwise (i.e., logical AND)  
Assume the input is non-empty

1, \*, 2, \*, >  
2, 1, 2, \_, >  
2, 0, 3, \_, >

2, -, 4, -, <  
 3, 1, 3, -, >  
 3, 0, 3, -, >  
 3, -, 5, -, <  
 4, -, 4, -, <  
 5, -, 5, -, <  
 4, \*, 6, \*, >  
 5, \*, 7, \*, >  
 6, -, H, 1, <  
 7, -, H, 0, <

Divide a natural number by 2 (truncate result if input is odd)

If representation is unary (assume 0 is empty, 1 is 1, 2 is 11, 3 is 111, etc)

1, \*, 2, \*, >  
 2, 1, 3, B, >  
 3, 1, 3, 1, >  
 3, -, 4, -, <  
 4, 1, 5, -, <  
 4, B, 5, -, <  
 5, 1, 5, 1, <  
 5, B, 2, B, >  
 2, -, 6, -, <  
 6, B, 6, 1, <  
 6, \*, 7, \*, >  
 7, -, H, -, <  
 7, 1, H, 1, <

Or:

1, \*, 2, \*, >  
 2, 1, 3, B, >  
 2, B, 2, B, >  
 2, -, 6, -, <  
 3, 1, 3, 1, >  
 3, -, 4, -, <  
 4, 1, 5, -, <  
 4, B, 5, -, <  
 5, 1, 5, 1, <  
 5, B, 5, B, <  
 5, \*, 2, \*, >  
 6, B, 6, 1, <  
 6, \*, H, \*