```
   load'32-bit-adder.ijs'
   test
          0           1 0
         _1           1 0
         _1           1 1
 4294967295           1 0
_4294967296           1 0
 4294967295           2 0
_4294967296          _1 0
 4294967295  4294967295 0
_4294967296 _4294967296 0
          3           2 1
   test ,. thirtytwoBitALU rows test
          0           1 0  1
         _1           1 0  0
         _1           1 1 _2
 4294967295           1 0  0
_4294967296           1 0  1
 4294967295           2 0  1
_4294967296          _1 0 _1
 4294967295  4294967295 0 _2
_4294967296 _4294967296 0  0
          3           2 1  1
   load'32-bit-adder.ijs'
   test ,. thirtytwoBitALU rows test
          0           1 0           1
         _1           1 0 _4294967296
         _1           1 1          _2
 4294967295           1 0 _4294967296
_4294967296           1 0           1
 4294967295           2 0 _4294967295
_4294967296          _1 0  4294967295
 4294967295  4294967295 0          _2
_4294967296 _4294967296 0           0
          3           2 1 _4294967295
   _.
_.
   _. - _.
_.
   v =: ? 1000000
   log
|value error: log
   jhelp'netscape'

   <. 3.4
3
   <. _3.4
_4
   1+<. 2 ^. v
20
   (0,20#2)rep v
0 1 1 0 1 1 1 0 1 0 0 1 1 1 0 1 0 0 0 1 0
```

```
   (0,19#2)rep v
1 1 0 1 1 1 0 1 0 0 1 1 1 0 1 0 0 0 1 0
   y. =: v
   e =. 1 + floor log2 | y. + y. = 0
|value error: log2
|   e=.1+floor     log2|y.+y.=0
   log2 =: 2&^.
   floor =: <.
   log2 =: 2&^.
   copy =: #
   e =. 1 + floor log2 | y. + y. = 0
   e
20
   f =. 1 drop (24 copy 2) rep floor (2 ^ 24 - e) * | y.
   f
1 0 1 1 1 0 1 0 0 1 1 1 0 1 0 0 0 1 0 0 0 0 0
   se =. (9 copy 2) rep (y. not_equal 0) * (256 * y. < 0) + e + 126
   se
0 1 0 0 1 0 0 1 0
   se,f
0 1 0 0 1 0 0 1 0 1 0 1 1 1 0 1 0 0 1 1 1 0 1 0 0 0 1 0 0 0 0 0
   fs2bin y.
|value error: fs2bin
|       fs2bin y.
   load'float.ijs'
   fs2bin y.
0 1 0 0 1 0 0 1 0 1 0 1 1 1 0 1 0 0 1 1 1 0 1 0 0 0 1 0 0 0 0 0
   ans =: fs2bin y.
   y. =: ans
   # 9 {. y.
9
   # 9 }. y.
23
   base
#.
   base 1
1
   (base 1 , 9 drop y.)
14498336
   2 ^ 23
8.38861e6
   (base 1 , 9 drop y.) % 2 ^ 23
1.72834
```