**PART 2**

Decimal 0.0098 = Binary 00111100001000001001000000101110

0.0098 can’t be represented precisely as binary. But as rounded it equals to 0.000000101001000000101110. The normalized number is 1.01001000000101110 x 10-7. So our exponent is 120 (found by the formula (-7+127)). And mantissa is 01001000000101110. And first bit is 0 due to being our number is positive.

Binary 11000001011100000000000000000000 = Decimal -15.0

First bit is 1, so number is negative. As the exponent part, 10000010 is equal to 130 and if we subtract 127, our exponent part will be 3. And mantissa part will give us 1.111 and it will be equal to 1.875. 2^3 times 1.875 equals to 15.

**PART 3**

**STEP1** Take first unmodified number in the sequence and compare with the others.

**STEP2** If it is higher than x of them, relocate it to x+1st place.

**STEP3** If there are numbers unmodified then jump **STEP1.**

**STEP4** If there aren’t any numbers left unmodified then HALT.