

C Language Programming: Homework #3
Assigned on 10/18/2016 (Tuesday), Due on 11/01/2016 (Tuesday)

Description:

This program prints the bit pattern of a number of int or float.

(1)input

- (a) An integer (N), which defines the number format (1=int, 2=float)
- (b) A number (X).

output

Print the bit pattern of the number.

Ex:

N=1,X=-1

output: 111111111111111111111111111111111111

Ex:

N=2,X=100.0

output:0100001011001000000000000000000000

(2)input

- (a) An integer (N)

output

Treat this integer as a float and print out its value by **%.23e** in printf(...)

Ex.

000000001000000000000000000000000000000000(%.23e)

Output: 1.17549435082228750796874e-38(輸出成%.23e格式)

- (3) Find out an example that what is the maximum and minimum float numbers and their bit patterns.

Find out what bit patterns will output by printf as nan or inf.

Command Line:

```
./hw3_1 2 100
```

```
./hw3_2 000000001000000000000000000000000000000000
```

Score:

hw3_1:25%

hw3_2:25%

hw3_3:25%

Report:25%

Ps.第三題請寫在report，第一二題請還是用Command line之方式讀取，感謝各位！