

**Assigned on 10/18/2016 (Tuesday), Due on 10/25/2016 (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:** 1111111111111111111111111111111111

Ex:

N=2,X=100.0

```
output:010000101100100000000000000000000000
```

**(2) input**

- (a) An integer (N)

output

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

Ex.

```
00000000100000000000000000000000(% .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 00000000100000000000000000000000
```

**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！