## C Language Programming: Homework #9 Assigned on 11/30/2023(Thirsday), Due on 12/07/2023(Thirsday)

1. Write a program that can input a float or double number and print out its bit pattern and vice versa (input 32 bits for float or 64 bits for double pattern and output its value).

Note: you should use the three techniques mentioned in the class:

- (a) an integer pointer to float or double,
- (b) union, and
- (c) bit field
- 2. Please check:
  - 1. Is it correct that the value, 1.1754943508222875079687365372222456778186655567720 87521508751706278417259454727172851560500000000000 0000000000000000000000e-38f,

is the smallest floating point number as stated in the textbook. If not, what is the smallest floating point number?

- 2. What is the bit pattern of f=0.0
- 3. run

Explain the result.