

## CSED211 Homework #1, Due Sep 17, 2018

1. Exercise 2.59 on page 164.
2. Exercise 2.65 on page 167
3. Exercise 2.69 on page 168
4. Exercise 2.74 on page 170
5. Exercise 2.80 on page 171
6. Exercise 2.88 on page 174.
7. Exercise 2.95 on page 178
8. Exercise 2.97 on page 179
9. For a single precision floating point number, it uses 32 bits. In fact, there are  $2^{32}$  different presentations possible using 32 bits. However, some presentations are not floating point number representation (ex. NaN). Find how many presentations are meaningful floating point number representation?
10. Following the bit-level floating point coding rules, implement the floating-point add and multiply function with the following prototype.

```
typedef unsigned float_bits;
```

```
float_bits float_add (float_bits x, float_bits y) ;
```

```
float_bits float_multiply (float_bits x, float_bits y) ;
```