

# DSP Homework 01

1. Write a summary of this week's video(s) and your further thought on the content.
2. Write a mini-article on the human brain or nervous system and how marvelous it is (at signal processing, for example).
3. Write a program to compute the expression of the form

$$a \odot b$$

where  $a$  and  $b$  are rational numbers and  $\odot$  is one of  $+$ ,  $-$ ,  $*$ ,  $/$ . Your program should run like the following

```
Please input your expression: 1/3 + 1/6
1/3 + 1/6 = 1/2
Please input your expression: 7/3 * 6/7
7/3 * 6/7 = 2
Please input your expression: 4/3 - 2
4/3 - 2 = -2/3
```

4. For your smart phone, laptop or desktop computer screen:
  - (a) Find out its model and resolution.
  - (b) Find out its color pixel pattern.
  - (c) Propose a better color pixel arrangement pattern.