Week 4

1. Draw a flowchart that can calculate the absolute value of a number. Then, write the corresponding C code with functions.
2. You are supposed to write a simple program that can convert the number grades into the letter grade. The corresponding table is down below. First, draw a flowchart, then implement it in C with functions.

Number Grade	Letter Grade
0 - 1.0	F
1.0 - 2.0	D
2.0 - 2.5	C
2.5 - 3.0	B
3.0 - 4.0	A

3. Suppose that the tax policy of our fantasy world is down below. Draw a flowchart that can calculate the tax based on income. Then, implement it in C with functions.

Income	Tax
0 - 15.000	income * .15
15.000 - 30.000	(income - 15000) * .18 + 2250
30.000 - 50.000	(income - 30000) * .2 + 5400
50.000 - 80.000	(income - 50000) * .27 +11000
More than 80.000	(income - 80000) * .33 + 21600