HW 3

This homework is to practice MIPS and C translations.

Background reading

- zyBooks: Chapter 2.1-2.4

Problem 1

Answer the following questions from zyBooks:

- 2.1. Use the variable to register mapping: f = $s0, g = $s1, h = $s2, i = $t0
- 2.2 Use the same mapping as 2.1
- 2.3 – 2.5
- 2.9 – 2.10
- 2.12 – 2.13

Unless noted otherwise, you should do all the sub parts for each of the questions. Also unless explicitly stated, assume the arrays contain integers.

Problem 2

Show the single MIPS instruction or minimal sequence of instructions for the following C statements:

```
i) b = 25 | a;
ii) x[4] = x[5] + a;
```

Assume that `a` corresponds to register $t0 and `b` corresponds to register $t1.
Also assume that the array `x` has a base address of $6{,}400{,}000_{ten}$ that's stored in the $t3 register.