



EBU6304: Software Engineering

Lab 8: Design Principles

Exercise 1: Aliasing

Recall the Aliasing Exercises given in Week 3. What they would cause to be printed has now been given to you. As a further exercise, consider why they work in this way. Give a written answer explaining what happens for each of Exercise 5, Exercise 8 and Exercise 11 in these exercises.

Exercise 2: Single Responsibility Principle

Give an explanation of why “A class should have only one reason to change” is an aspect of good quality code, and why it is considered one way of describing the Single Responsibility Principle.

Exercise 3: Liskov Substitution Principle

The Liskov Substitution Principle can be summarised as stating that you should be cautious about use of inheritance. So although overriding a method is an important aspect of object-oriented programming, the Liskov Substitution Principle suggests you should only do it in certain ways. Explain in more detail what the Liskov Substitution Principles states about how to use inheritance, and why keeping to it helps create good quality code.