**Question 1.** [8 MARKS]

Carefully read the following code:

```
1  class Furniture:
2      """A representation of a piece of furniture."""
3      dimensions: list[float]  # (height, width, depth) in meters
4      _weight: int  # weight in kg
5
6      def __init__(self, dimensions: list[float], weight: int) -> None:
7          """Initialize this Furniture."""
8          self.dimensions = dimensions
9          self._weight = weight
10
11 class Cabinet(Furniture):
12     """A representation of a cabinet for storing items."""
13     door_open: bool
14     contents: LinkedList
15
16     def __init__(self, dimensions: list[float], weight: int, door_open: bool) -> None
17         """Initialize this Cabinet."""
18         Furniture.__init__(self, dimensions, weight)
19         self.door_open = door_open
```