Further Modula-3

Describe the facilities in Modula-3 for defining generic interfaces and modules. [5 marks]

Illustrate your answer by sketching a generic interface and implementation for a `Bag`, that is, a collection of items of the same type (possibly including duplicates), implemented as an opaque object with `insert` and `remove` methods. [10 marks]

The default `Bag` should be implemented as a stack, using a last-in first-out policy. Describe briefly alternative implementations providing specialisations of `Bag` to give a `Queue` (first-in first-out) and `Set` (ignoring duplicates). [5 marks]