

2003 Paper 4 Question 8

Concurrent Systems and Applications

For each of the following topics explain what features Java provides and give a brief example of when you might use them:

- (a) scheduling clean-up operations when a data structure ceases to be reachable;
- (b) calling a method given its name as a string;
- (c) converting a data structure based on objects to one held in a `byte[]` array;
- (d) creating and instantiating a new class given its definition in a `byte[]` array;
- (e) implementing a method in a language other than Java.

There is no need to recall the precise names and parameters of library facilities. So long as you are clear about the principles involved, you may assume that your reader will be able to look up the details. [4 marks each]