

## Past exam questions (A)

The class `TicketMachine` provides objects that control automated ticket machines. The class has the following methods of relevance to this question:

- `public int getPrice()` returns the price of tickets supplied by the machine.
- `public int getTotal()` returns the total amount of money received by a machine.
- `public void resetTotal()` clears the total amount of money received by a machine.

You should *not* write the `TicketMachine` class.

The `MachineCollection` class uses an `ArrayList` to store `TicketMachine` objects. The `MachineCollection` class has the following methods:

- `public void add(TicketMachine tm)` stores the given machine to the collection.
- `public int numberOfMachines()` returns the number of machines in the collection.
- `public int collectMoney()` returns the total amount of money held in all the machines in the collection. In addition, it clears the total stored in each machine. Therefore, once this method has completed, the total in all the machines in the collection would be zero.
- `public int clearMachines(int minimumPrice)` removes all machines from the collection whose price is below the `minimumPrice` parameter. The number of machines removed is returned by the method.

Write the `MachineCollection` class in full.

You may leave out comment texts, but indicate where you would put a comment by writing the comment symbols and three dots, thus:

```
/**
 * ...
 */
```

Your definition should be a complete, syntactically valid class.