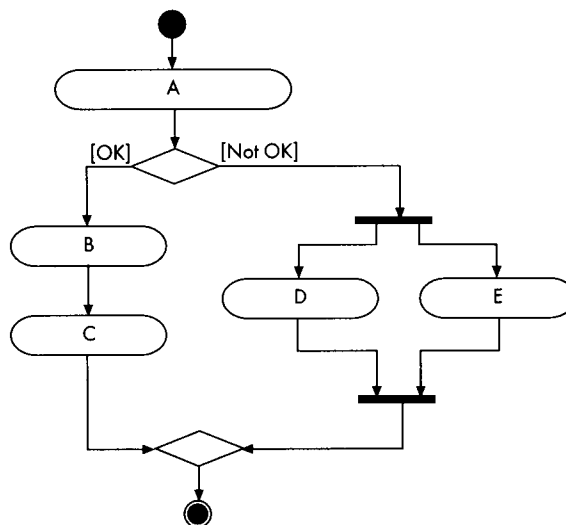


calculates the amount owing. The driver inserts the money and if it is more than the amount owing, the machine gives change. The machine then raises the barrier, the driver drives out of the car park, and the machine lowers the barrier.

- a Draw an activity diagram without swimlanes to illustrate what happens when a driver leaves the car park. Your diagram should include an example of alternative behaviours.
- b Add swimlanes to your diagram to show who or what is responsible for the various activities.

8.5 Add swimlanes to Figure 8.5, the activity diagram for the 'Issue bike' use case, to show which activities are carried out by the receptionist, which by the computer and which by the customer.



a   do A  
    If OK then  
        do B  
        do C  
    Else  
        do D or E (\*not both\*)  
    End

b   do A  
    If OK then  
        do B  
        do C  
    Else  
        do D and E (\*in any order\*)  
    End

c   do A  
    do B  
    do C  
    If Not OK then  
        do D and E  
    End

d   do A  
    If Ok then  
        do B  
        do C  
    Else  
        do D  
        do E  
    End

Figure 8.20 Activity diagram and pseudocode for Exercise 8.6