1 **import** java.util.\*;

2

3 **public** **class** Queues

4 {

5 **public** **static** **void** main(String[] args)

6 {

7 ArrayDeque <WorkOrder> tasks = n**e**w ArrayDeque<WorkOrder>();

8 PriorityQueue <WorkOrder> ptasks = **new** PriorityQueue<WorkOrder>();

9

10 tasks.add(**new** WorkOrder("1C", "Polish door knob.", 10));

11 tasks.add(**new** WorkOrder("8A", "Rats running around kitchen.", 1));

12 tasks.add(**new** WorkOrder("8A", "Replace light bulb in hall.", 7));

13 tasks.add(**new** WorkOrder("12B", "Toilet backing up.", 1));

14

15 System.out.println("Work Orders Non-prioritized by an ArrayQueue");

16 **while**(tasks.size() != 0)

17 {

18 System.out.println(tasks.remove());

19 }

20

21 System.out.println();

22

23 ptasks.add(**new** WorkOrder("1C", "Polish door knob.", 10));

24 ptasks.add(**new** WorkOrder("8A", "Rats running around kitchen.", 1));

25 ptasks.add(**new** WorkOrder("8A", "Replace light bulb in hall.", 7));

26 ptasks.add(**new** WorkOrder("12B", "Toilet backing up.", 1));

27

28 System.out.println("Work Orders Prioritized by " +

29 "a PriorityQueue");

30 **while**(ptasks.size() != 0)

31 {

32 System.out.println(ptasks.remove());

33 }

34 }

35 }

**Figure 13.30 The application Queues.**