| | (c) | | The algorithm makes use of the Boolean swapped which will terminate the outer loop as soon as a fully sorted list is detected. Use of n to control the inner loop reduces the number of comparisons needed during each pass. On average, the bubble sort will make n^2 comparisons – in this case, since n = 5000, 25,000,000 comparisons would be needed. | **2** | 1 mark each for a maximum of 2 marks: use of Boolean swapped use of n to control inner loop reference to average number of comparisons needed |