

To prepare for this homework session, see if you can answer the following questions. The answers will be provided during the presentation.

1. Some revision first: where is the error in this code?

```
Line1  PROCEDURE linearSearch (ARRAY OF INTEGER numbers, INTEGER itemToFind )
Line2  DECLARE found INITIALLY false
Line3  DECLARE counter INITIALLY 0
line4  REPEAT
Line5    SET found TO numbers[counter] = itemToFind
Line6    SET counter TO counter + 1
Line7  UNTIL counter > length( numbers) OR found = true
line8  IF found THEN
line9    SEND itemToFind & " found at position" & (counter) TO DISPLAY
line10 ELSE
line11  SEND "Item not found" TO DISPLAY
Line12 END IF
line13 END PROCEDURE
```

2. An integer array contains 7000 values in ascending order. How many splits would a binary search require to identify a particular value?
3. An array of high scores in a game is continually updated as players complete their scores. If the choice of sorting algorithm was between a Bubble sort and an Selection sort, which would be more efficient to use and why?