4.	(b)	(iii)	See below.	**4**	1 mark for nested loop to process 2-D array. 1 mark for finding element with lift in each column. 1 mark for deciding if lift will not be called (assign 99 to distance). 1 mark for calculating and storing difference if lift can be called.

```
1.  FOR row FROM 0 TO 7 DO
2.          FOR column FROM 0 TO 3 DO
3.                  IF lifts [row] [column] <> "" THEN
4.                          IF lifts [row] [column] = "S" THEN
5.                                  SET distance[column] TO floor - row
6.                          ELSE IF direction = "A" AND row > floor THEN
7.                                  SET distance[column] TO floor - row
8.                          ELSE IF direction = "D" AND row < floor THEN
9.                                  SET distance[column] TO floor - row
10.                         ELSE
11.                                 SET distance[column] TO 99
12.                         END IF
13.                 END IF
14.         END FOR
15. END FOR
```