

Question :

Suppose that the keys A through G with the hash values given below are inserted in some order into an initially empty table of size 7 using a linear-probing table (with no resizing for this problem). Which of the following could not possibly result from inserting these keys?

| Keys | A | B | C | D | E | F | G |
|------|---|---|---|---|---|---|---|
| Hash | 2 | 0 | 0 | 4 | 4 | 4 | 1 |

- a.* E F G A C B D
- b.* C E B G F D A
- c.* B D F A C E G
- d.* C G B A D E F
- e.* F G B D A C E
- f.* G E C A D B F

Solution :

Only option d is possible from the following options. When we apply a Linear Probing Hash Symbol Table to the array then the representation will be C, G, B, A, D, E, F.