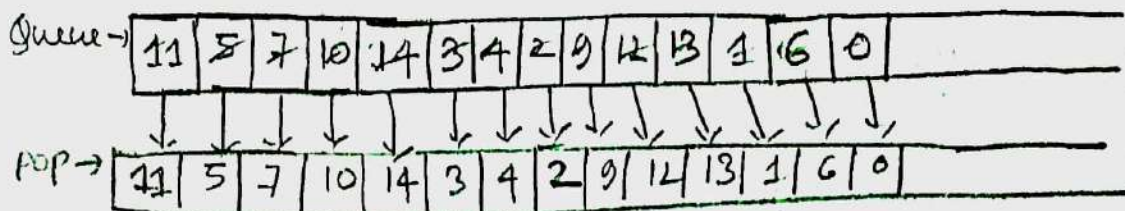


BFS Simulation

Id = 1711661 % 15 = 11

Starting vertex = 11

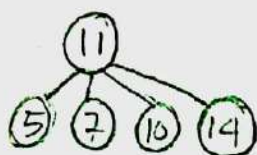


| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|----------|---|----|---|---|---|----|---|----|---|----|----|-----|----|----|----|
| parent | 2 | 14 | 7 | 5 | 5 | 11 | 3 | 11 | | 10 | 11 | N/A | 10 | 10 | 11 |
| Distance | 3 | 2 | 2 | 2 | 2 | 1 | 3 | 1 | | 2 | 1 | 0 | 2 | 2 | 1 |

Step-1

Q → [5, 7, 10, 14]

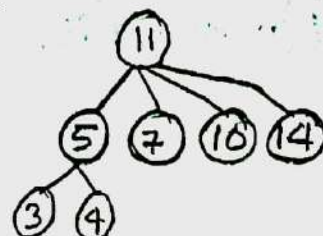
pop → 11



Step-2

Q → [7, 10, 14, 3, 4]

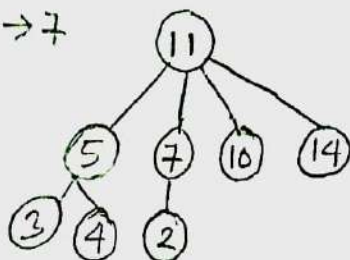
pop → 5



Step-3

Q → [10, 14, 3, 4, 2]

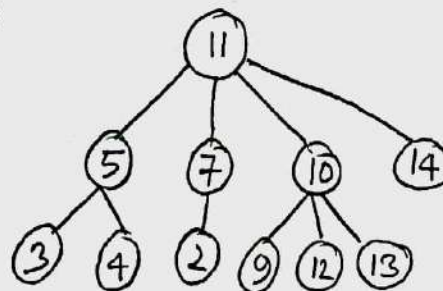
pop → 7



Step-4

Q → [14, 3, 4, 2, 9, 12, 13]

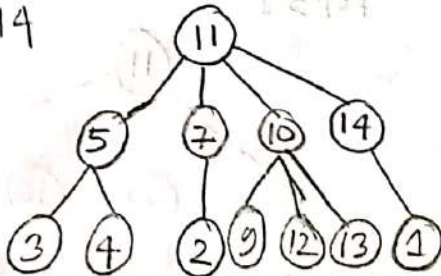
pop → 10



Step-5

Q → [3 | 4 | 2 | 9 | 12 | 13 | 1]

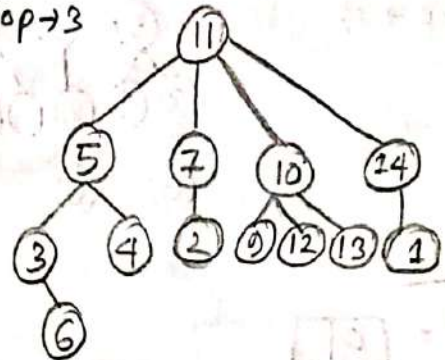
pop → 14



Step-6

Q → [4 | 2 | 9 | 12 | 13 | 1 | 6]

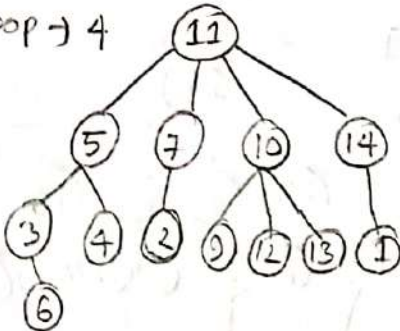
pop → 3



Step-7

Q → [2 | 9 | 12 | 13 | 1 | 6]

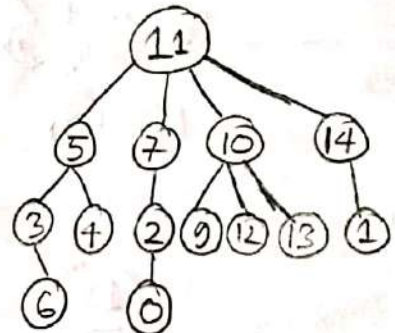
pop → 4



Step-8

Q → [9 | 12 | 13 | 1 | 6 | 0]

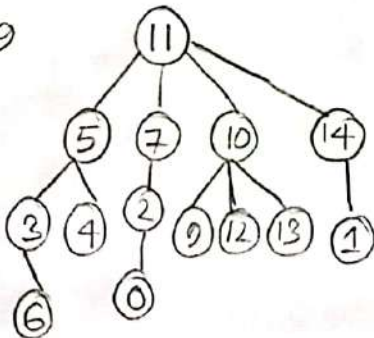
pop → 2



Step-9

Q → [12 | 13 | 1 | 6 | 0]

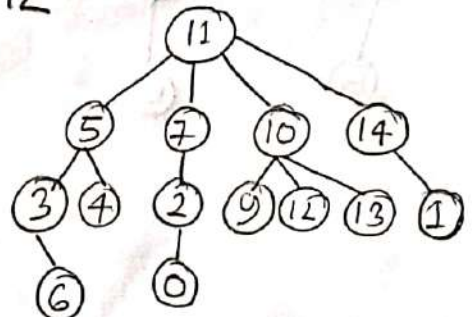
pop → 9

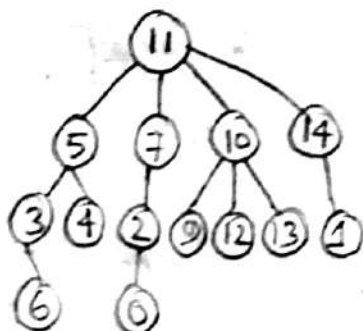
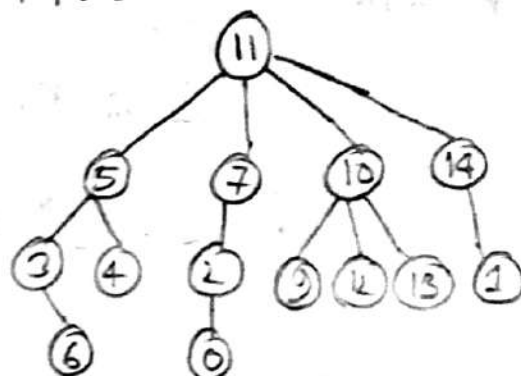
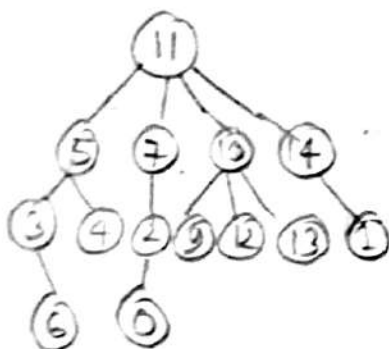
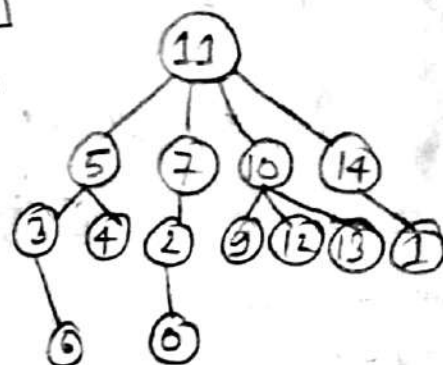


Step-10

Q → [13 | 1 | 6 | 0]

pop → 12



Step-11 $Q \rightarrow [1, 6, 0]$ pop $\rightarrow 13$ Step-12 $Q \rightarrow [6, 0]$ pop $\rightarrow 1$ Step-13 $Q = [0]$ pop $\rightarrow 6$ Step-14 $Q = []$ pop $\rightarrow 0$ Final BFS