

## آزمایش اول

(ا)

```
0: Arrival of Task 12 (ready queue length = 1)
0: Run Task 12 for duration 2 (ready queue length = 0)
1: Arrival of Task 13 (ready queue length = 1)
2: Arrival of Task 14 (ready queue length = 2)
2: IO wait for Task 12 for duration 1
2: Run Task 14 for duration 1 (ready queue length = 1)
3: Arrival of Task 15 (ready queue length = 2)
3: Wakeup of Task 12 (ready queue length = 3)
3: IO wait for Task 14 for duration 2
3: Run Task 12 for duration 2 (ready queue length = 2)
5: Wakeup of Task 14 (ready queue length = 3)
5: Run Task 14 for duration 1 (ready queue length = 2)
6: Run Task 15 for duration 2 (ready queue length = 1)
8: Run Task 15 for duration 1 (ready queue length = 1)
9: Run Task 13 for duration 2 (ready queue length = 0)
11: Run Task 13 for duration 2 (ready queue length = 0)
13: Run Task 13 for duration 2 (ready queue length = 0)
15: Run Task 13 for duration 1 (ready queue length = 0)
16: Stop
```

(ب)

```
0: Arrival of Task 12 (ready queue length = 1)
0: Run Task 12 for duration 2 (ready queue length = 0)
1: Arrival of Task 13 (ready queue length = 1)
2: Arrival of Task 14 (ready queue length = 2)
2: IO wait for Task 12 for duration 1
2: Run Task 13 for duration 2 (ready queue length = 1)
3: Arrival of Task 15 (ready queue length = 2)
3: Wakeup of Task 12 (ready queue length = 3)
4: Run Task 14 for duration 1 (ready queue length = 3)
5: IO wait for Task 14 for duration 2
5: Run Task 15 for duration 2 (ready queue length = 2)
7: Wakeup of Task 14 (ready queue length = 3)
7: Run Task 12 for duration 2 (ready queue length = 3)
9: Run Task 14 for duration 1 (ready queue length = 2)
10: Run Task 13 for duration 4 (ready queue length = 1)
14: Run Task 15 for duration 1 (ready queue length = 1)
15: Run Task 13 for duration 1 (ready queue length = 0)
16: Stop
```