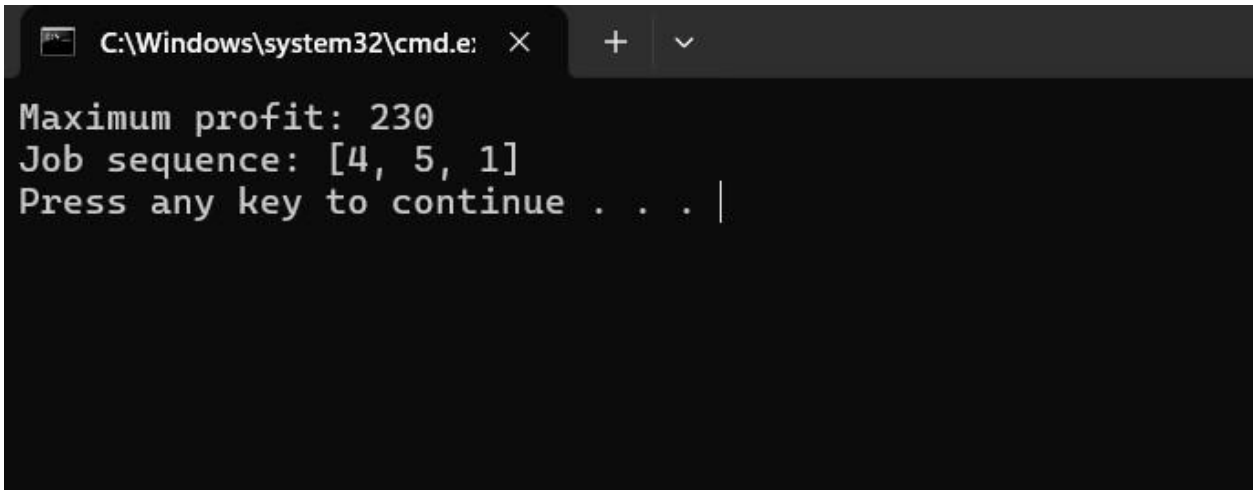
113) Job sequence with deadlines

CODE:

```
def job_sequence_with_deadlines(jobs):
jobs.sort(key=lambda x: x[2], reverse=True)

   max_deadline = max(jobs, key=lambda x:
x[1])[1]      slot = [-1] * (max_deadline + 1)
result = [None] * max_deadline

   total_profit = 0
        for job in jobs:
profit = job[2]
deadline = job[1]
               for j in range(deadline, 0, -
1):            if slot[j] == -1:
slot[j] = job[0]                  total_profit
+= profit                break

   job_sequence = [job_id for job_id in slot if job_id != -1]

   return total_profit, job_sequence
 if __name__ ==
"__main__":     jobs = [
(1, 4, 70),
       (2, 1, 80),
       (3, 1, 30),
       (4, 1, 100),
       (5, 3, 60)
   ]
   max_profit, job_sequence =
job_sequence_with_deadlines(jobs)     print(f"Maximum profit:
{max_profit}")     print(f"Job sequence: {job_sequence}")
```

OUTPUT:



TIME COMPLEXITY : O(n)