# Central university of Haryana

Department of computer science & engineering under SOET



## ADA lab
## (BT CS 505A)
Lab-5.

**Submitted by :-**                          **submitted to :-**

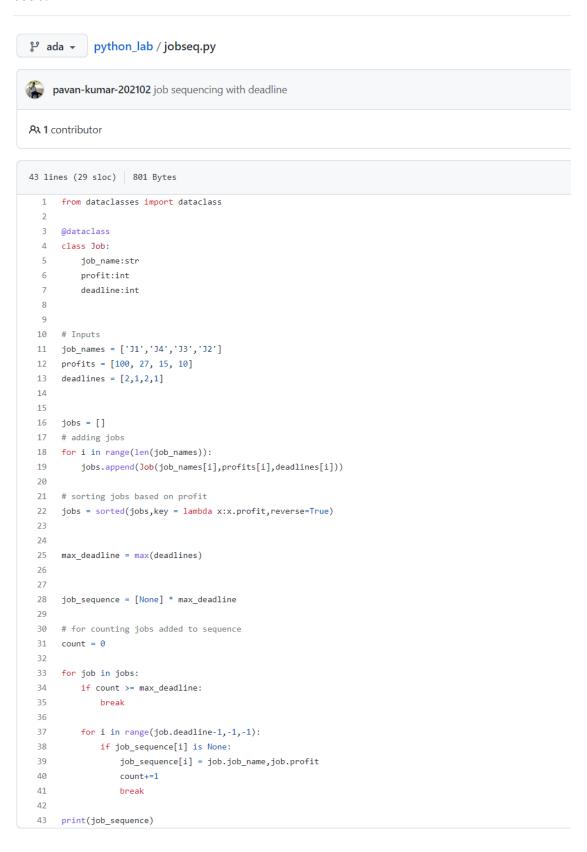 Ponnaganti pavan kumar                      anant rajee bara

ROLL NO: 202102

## Problem statement:
Implement jobsequencing with deadline in which output as maximum profit

## code:

pavan-kumar-202102 job sequencing with deadline

♗ 1 contributor

43 lines (29 sloc)    801 Bytes

```python
from dataclasses import dataclass

@dataclass
class Job:
    job_name:str
    profit:int
    deadline:int


# Inputs
job_names = ['J1','J4','J3','J2']
profits = [100, 27, 15, 10]
deadlines = [2,1,2,1]


jobs = []
# adding jobs
for i in range(len(job_names)):
    jobs.append(Job(job_names[i],profits[i],deadlines[i]))

# sorting jobs based on profit
jobs = sorted(jobs,key = lambda x:x.profit,reverse=True)


max_deadline = max(deadlines)


job_sequence = [None] * max_deadline

# for counting jobs added to sequence
count = 0

for job in jobs:
    if count >= max_deadline:
        break

    for i in range(job.deadline-1,-1,-1):
        if job_sequence[i] is None:
            job_sequence[i] = job.job_name,job.profit
            count+=1
            break

print(job_sequence)
```

**Output:**

```
PS E:\sem 5\lab program> python -u "e:\sem 5\lab program\jobseq.py"
[('J4', 27), ('J1', 100)]
```

**Github link:**