Job Sequencing

Let there be 14 Jobs with profits

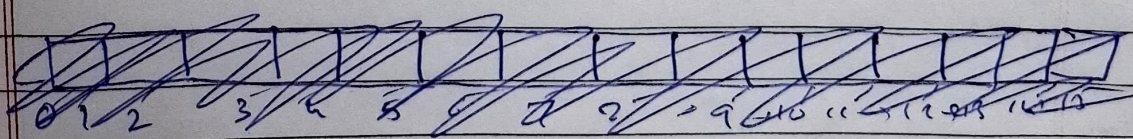
{ 22, 19, 29, 28, 30, 31, 27, 25, 24, 26, 14, 27, 19, 13 }

T.C.T = { 3, 3, 8, 6, 7, 5, 10, 4, 6, 12, 13, 2, 14, 13 }

Step 1: Arrange the jobs in descending order of profit.

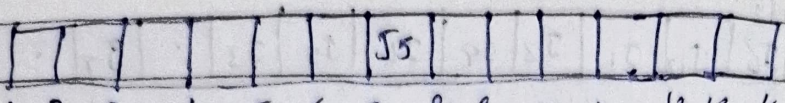
JOB	PROFIT	DEADLINE
J_5	30	7
J_3	29	8
J_4	28	6
J_7	27	10
J_{12}	27	2
J_{10}	26	12
J_8	25	4
J_9	24	6
J_1	22	3
J_6	21	5
J_2	19	8
J_{13}	19	14
J_{11}	14	13
J_{14}	11	1

1)



(30,7)

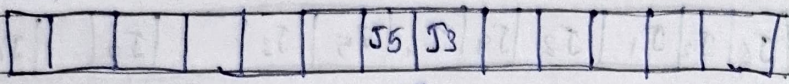
1) | | | | | | | J5 | | | | | | |



1 2 3 4 5 6 7 8 9 10 11 12 13 14

30

(29,8)

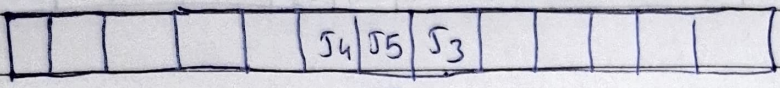


2) | | | | | | | J5 | J3 | | | | | |

59

28,6

3) | | | | | | J4 | J5 | J3 | | | | | |



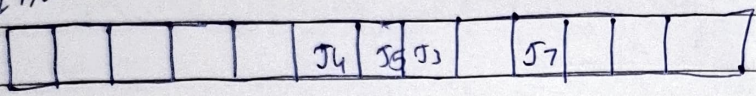
87

27,10

4) | | | | | | J4 | J5 | J3 | | J7 | | | |

114

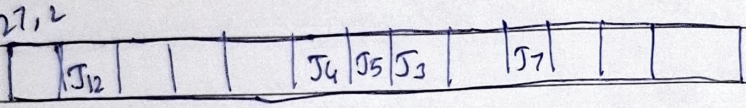
27,2



5) | | J12 | | | | J4 | J5 | J3 | | J7 | | | |

141

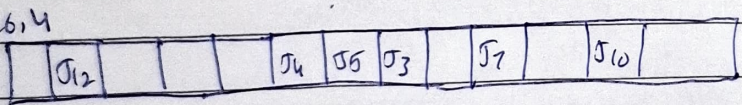
26,4



6) | | J12 | | | | J4 | J5 | J3 | | J7 | | J10 | |

167

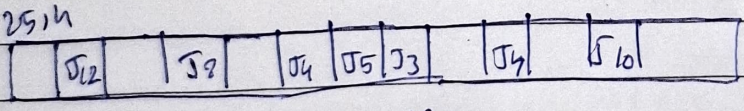
25,4



7) | | J12 | | J8 | | J4 | J5 | J3 | | J7 | | J10 | |

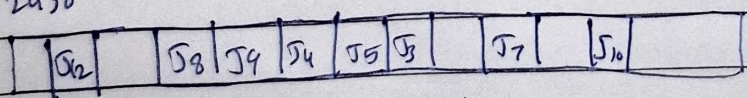
192

24,6



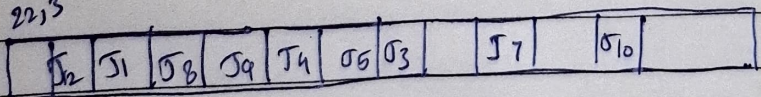
8) | | J12 | | J8 | J9 | J4 | J5 | J3 | | J7 | | J10 | |

216



22,3

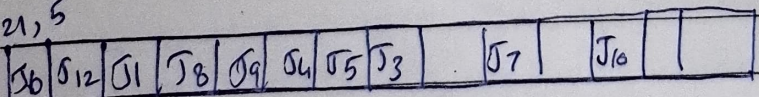
9) | | J12 | J1 | J8 | J9 | J4 | J5 | J3 | | J7 | | J10 | |



236

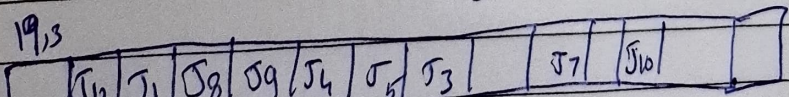
21,5

10) | J6 | J12 | J1 | J8 | J9 | J4 | J5 | J3 | | J7 | | J10 | | |



259

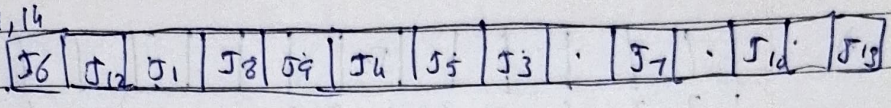
19,3



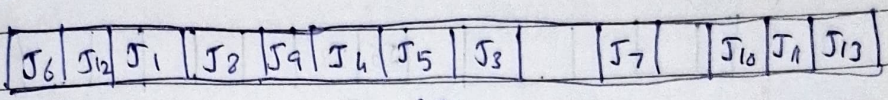
11) | | J12 | J1 | J8 | J9 | J4 | J5 | J3 | | J7 | | J10 | | |

J_1 → Skip

12) 19, 14



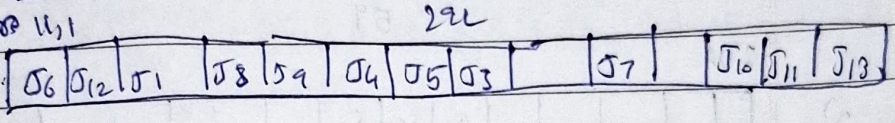
J6	J12	J1	J8	J9	J4	J5	J3	·	J7	·	J10	J13



228

14, 13

13)



J6	J12	J1	J8	J9	J4	J5	J3		J7		J10	J11	J13

292

11, 1

14)

J6	J12	J1	J8	J9	J4	J5	J3		J7		J10	J11	J13

Profit: 292.