

Q 4

Using job sequencing find the profit for the given data,  $n=4$ ,  $p = (100, 10, 15, 27)$

$$d = \begin{pmatrix} 2 & 1 & 2 & 1 \\ 1 & 2 & 3 & 4 \end{pmatrix}$$

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Arrange the jobs in decreasing order of profit

$$\therefore P = (100, 27, 15, 10)$$

$$d = \begin{pmatrix} 1 & 4 & 3 & 2 \\ 2 & 1 & 2 & 1 \\ 1 & 4 & 3 & 2 \end{pmatrix}$$

Job	Action	Sequence	Profit
Considered			
$J_1$	Assign [1-2]	-	100
$J_4$	Assign [0-1]	{1}	27
$J_3$	Reject	{1, 2}	-
$J_2$	Reject	{1, 2}	-

$$\begin{aligned} \text{Profit} &= J_1 + J_4 \\ &= 100 + 27 \\ &= \underline{\underline{127}} \end{aligned}$$