Comparison to optimal subsection problems data

Ugur Satic[1], Peter Jacko and Christopher Kirkbride
Lancaster University, Lancaster LA1 4YW, UK

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[1]CONTACT Ugur Satic. Email: u.satic@lancaster.ac.uk

Abstract

This document shows the problem data of Satic et al. (2020) which is used for comparison in subsection 5.1.

Table 1: Two project types and two tasks problem.

2 project types and 2 tasks problem						
Project type (j)	Reward (r_j)	Tardiness cost (w_j)	Due date (F_j)	Task no (i)	Normal task duration ($t_{j,i}$)	Resource usage ($b_{j,i}$)
1	3	1	8	1	2	2
				2	2	2
2	10	9	5	1	3	1
				2	1	3
						Resource capacity = 3

Table 2: Two project types and three tasks problem.

2 project types and 3 tasks problem						
Project type (j)	Reward (r_j)	Tardiness cost (w_j)	Due date (F_j)	Task no (i)	Normal task duration ($t_{j,i}$)	Resource usage ($b_{j,i}$)
1	12	8	10	1	1	1
				2	2	2
				3	5	1
2	6	5	15	1	4	1
				2	3	2
				3	4	1
						Resource capacity = 3

Table 3: Three project types and two tasks problem.

3 project types and 2 tasks problem						
Project type (j)	Reward (r_j)	Tardiness cost (w_j)	Due date (F_j)	Task no (i)	Normal task duration ($t_{j,i}$)	Resource usage ($b_{j,i}$)
1	8	5	10	1	5	1
				2	2	1
2	5	3	8	1	1	2
				2	3	1
3	20	19	10	1	2	3
				2	7	2
						Resource capacity = 3

Bibliography

Ugur Satic, Peter Jacko, and Christopher Kirkbride. Performance evaluation of scheduling policies for the dynamic and stochastic resource-constrained multi-project scheduling problem. *International Journal of Production Research*, 2020. doi: 10.1080/00207543.2020.1857450. Advance online publication.