

Store	Demand
$S_1$	22
$S_2$	27
$S_3$	30
$S_4$	58
$S_5$	33
$S_6$	29
$S_7$	26
$S_8$	6
$S_9$	22
$S_{10}$	24

Store	Demand	Opening Hours
$S_1$	22	06:30 - 22:00
$S_2$	27	06:15 - 22:00
$S_3$	30	06:00 - 22:00
$S_4$	58	06:00 - 00:00
$S_5$	33	06:00 - 22:00
$S_6$	29	06:00 - 22:00
$S_7$	26	06:00 - 22:00
$S_8$	6	20:00 - 00:00
$S_9$	22	20:00 - 00:00
$S_{10}$	24	18:00 - 23:00

Store	Unload	Store	Unload
1	6	87837	787
2	7	78	5415
3	545	778	7507
4	545	18744	7560
5	88	788	6344

Initial Solution (left to right)						
Routes	Store	Unload	Store	Unload	Store	Unload
$R_1$	10	24	9	6		
$R_2$	9	16	4	14		
$R_3$	3	30				
$R_4$	4	30				
$R_5$	4	14	6	16		
$R_6$	7	26	1	4		
$R_7$	6	13	5	17		
$R_8$	5	16	8	6	1	8
$R_9$	1	10	2	20		
$R_{10}$	2	7				

2-Swap first stores on $R_1$ and $R_2$ for Initial Solution (left to right)						
Routes	Store	Unload	Store	Unload	Store	Unload
$R_1$	9	22				
$R_2$	10	24	4	14		
$R_3$	3	30				
$R_4$	4	30				
$R_5$	4	14	6	16		
$R_6$	7	26	1	4		
$R_7$	6	13	5	17		
$R_8$	5	16	8	6	1	8
$R_9$	1	10	2	20		
$R_{10}$	2	7				
After Update Solution						
Routes	Store	Unload	Store	Unload		
$R_1$	9	22				
$R_2$	10	24	4	6		
$R_3$	3	30				
$R_4$	4	30				
$R_5$	4	22	6	8		
$R_6$	7	26	1	4		
$R_7$	6	21	5	9		
$R_8$	5	24	8	6		
$R_9$	1	18	2	12		
$R_{10}$	2	15				
Final Solution						
Routes	Store	Unload	Store	Unload		
$R_1$	9	22	5	3		
$R_2$	10	24				
$R_3$	3	30				
$R_4$	4	30				
$R_5$	4	28				
$R_6$	5	30				
$R_7$	1	22	8	6		
$R_8$	7	26				
$R_9$	6	29				
$R_{10}$	2	27				

Dock Jobs created from Routes				
Jobs	earliest time	latest time	route time	job dura
$J_0$	12831	75231	19938	22338
$J_1$	12176	67376	21248	23648
$J_2$	12831	75351	19818	22098
$J_3$	15120	70320	15360	17760
$J_4$	61436	71159	17257	19537
$J_5$	13595	69035	18170	20330
$J_6$	59694	71940	25178	27278
$J_7$	14249	69509	17042	19382
$J_8$	19360	73840	8500	10720
$J_9$	52235	68195	27170	29210