Process specification Sheet

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2103134
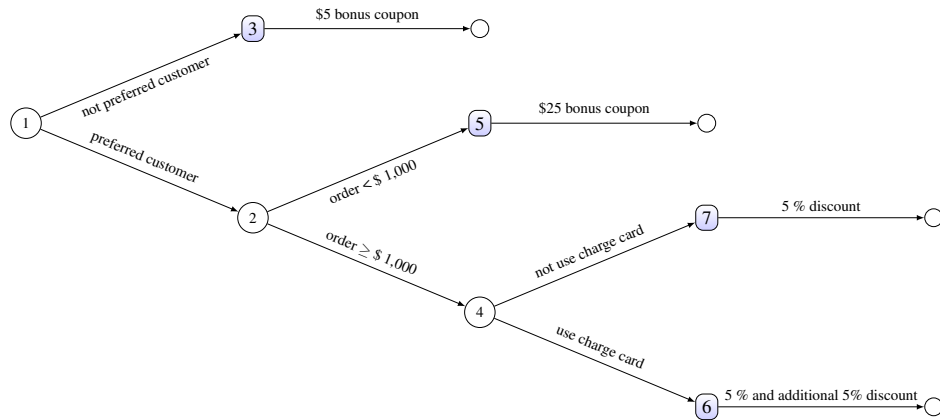

Algorithm 1 Problem-1

1: **if** The customer is preffered **then**
2:      **if** Customer order more than \$1,000 **then**
3:          Apply a 5% discount
4:          **if** Customer used charge card **then**
5:             Apply an additional 5% discount
6:          **end if**
7:      **else**
8:          Award \$25 bonus coupon
9:      **end if**
10: **else**
11:      Award \$5 bonus coupon
12: **end if**

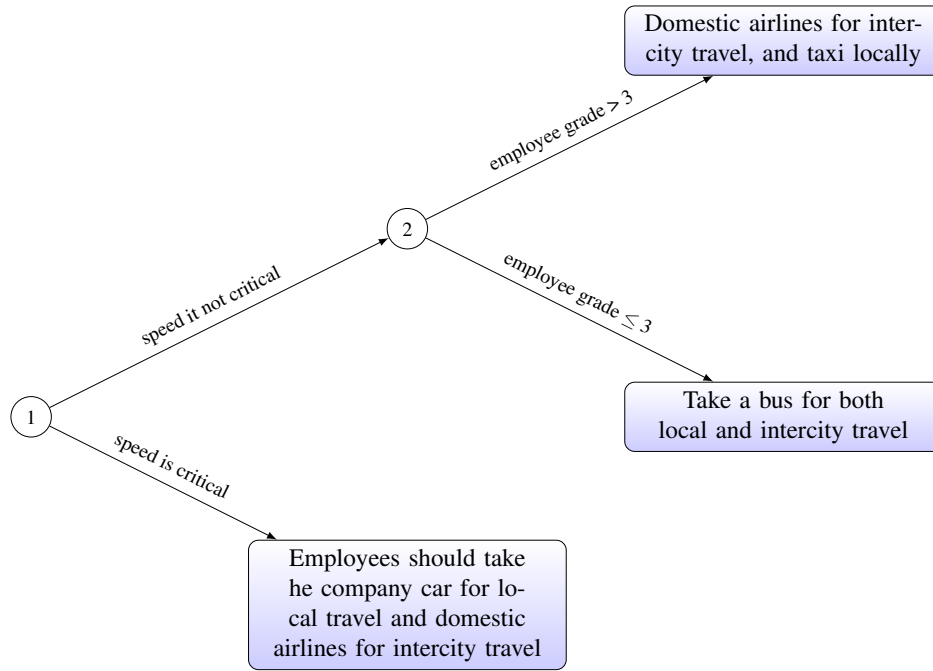|	Rules							
Conditions	1	2	3	4	5	6	7	8
preferred Customer	Y	Y	Y	Y	N	N	N	N
order $\geq$ \$1,000	Y	Y	N	N	Y	Y	N	N
used our charge card	Y	N	Y	N	Y	N	Y	N
Actions								
5 \$ discount	✓	✓						
Additional 5 % discount	✓							
\$25 bonus coupon			✓	✓				
\$5 bonus coupon					✓	✓	✓	✓

Algorithm 2 Problem-2

1: **if** Speed is critical **then**
2:     employees should take the company car for local travel and domestic airlines (economy class) for intercity travel
3: **else**
4:     **if** employee grade is 3 or lower **then**
5:         Employee should take a bus for both local and intercity travel.
6:     **else**
7:         Should use domestic airlines (economy class) for intercity travel, and use a taxi locally.
8:     **end if**
9: **end if**

	Rules			
Conditions	1	2	3	4
Speed is critical	Y	Y	N	N
Employee grade ≤ 3	Y	N	Y	N
Actions				
Take company car and domestic airlines	✓	✓		
Take a bus for both			✓	
Taxi locally and domestic airlines				✓

Domestic airlines for inter-city travel, and taxi locally

Take a bus for both local and intercity travel

Employees should take he company car for local travel and domestic airlines for intercity travel

employee grade > 3

employee grade ≤ 3

speed it not critical

speed is critical

Algorithm 3 Problem-3

1: **if** Parcel is sent by express **then**
2:     Basic charge will be 6 \$/kg
3: **else**
4:     Basic charge will be 4 \$/kg
5: **end if**
6: **if** Distance of is over 200km **then**
7:     Charge will increase by 1 \$/kg
8: **end if**
9: **if** Weight is over 10kg **then**
10:     charge extra $0.5 \times (w - 10)$
11: **end if**

		Rules							
Conditions		1	2	3	4	5	6	7	8
Sent by Express		Y	Y	Y	Y	N	N	N	N
Distance is over 200km		Y	Y	N	N	Y	Y	N	N
weight is over 10kg		Y	N	Y	N	Y	N	Y	N
Actions									
Basic charge will be 6 $/kg		✓	✓	✓	✓				
Basic charge will be 4 $/kg						✓	✓	✓	✓
Charge will increase by 1 $/kg		✓	✓			✓	✓		
charge extra $0.5 \times (w - 10)$		✓		✓		✓		✓	

increase by charge by 1 $/kg

distance is over 200km

charge 4 $/kg

not sent by express

$w > 10$

1

charge extra $0.5 \times (w - 10)$

sent by express

$w > 10$

charge 6$/kg

distance is over 200km

increase by charge by 1 $/kg