1、 Draw a diagram to show how the sequence structure might be applied to an everyday task.

2、 Draw a diagram similar to show how the selection structure might be applied to an everyday task.

3、 Draw a diagram similar to show how the iteration structure might be applied to an everyday task.

4、 Decision Table & Decision Tree

Case In Point 5.2: Rock Solid Outfitters (Part 1)

Leah Jones is the IT manager at Rock Solid Outfitters, a medium-sized supplier of outdoor climbing and camping gear. Steve Allen, the marketing director, has asked Leah to develop a special Web-based promotion. As Steve described it to Leah, Rock Solid will provide free shipping for any customer who either completes an online survey form or signs up for the Rock Solid online newsletter. Additionally, if a customer completes the survey and signs up for the newsletter, Rock Solid will provide a $10 merchandise credit for orders over $100 or more. Leah has asked you to develop a decision table that will reflect the promotional rules that a programmer will use. She wants you to show all possibilities, then to simplify the results to eliminate any combinations that would be unrealistic or redundant.

Step 1: Design the table with three possible conditions and two possible outcomes.

RULES	1	2	3	4	5	6	7	8
Completed survey form?	Y	Y	Y	Y	N	N	N	N
Signed up for newsletter?	Y	Y	N	N	Y	Y	N	N
Order > $100?	Y	N	Y	N	Y	N	Y	N
Free shipping	✓	✓	✓	✓	✓	✓		
$10 merchandise credit	✓							

Step 2: Now the rules can be simplified

RULES	1	2	3	4	5	6	7	8
Completed survey form?	Y	Y	Y	Y	N	N	N	N
Signed up for newsletter?	Y	Y	N	N	Y	Y	N	N
Order > $100?	Y	N	—	—	—	—	—	—
Free shipping	✓	✓	✓	✓	✓	✓		
$10 merchandise credit	✓							

Step 3: Finally, based on the analysis described in Step 2, the original eight rules can be combined into just five rules,

RULES	1	2	3	4	5
Completed survey form?	Y	Y	Y	N	N
Signed up for newsletter?	Y	Y	N	Y	N
Order > $100?	Y	N	—	—	—
Free shipping	✓	✓	✓	✓	
$10 merchandise credit	✓				

Step4: Decision Tree

Completed survey form?

Y → Signed up for newsletter?
- **Y** → Order > $100?
  - **Y** → Free shipping + $10 merchandise credit
  - **N** → Free shipping
- **N** → Order > $100? → Free shipping

N → Signed up for newsletter?
- **Y** → Free shipping
- **N** → N