

# CSE-323

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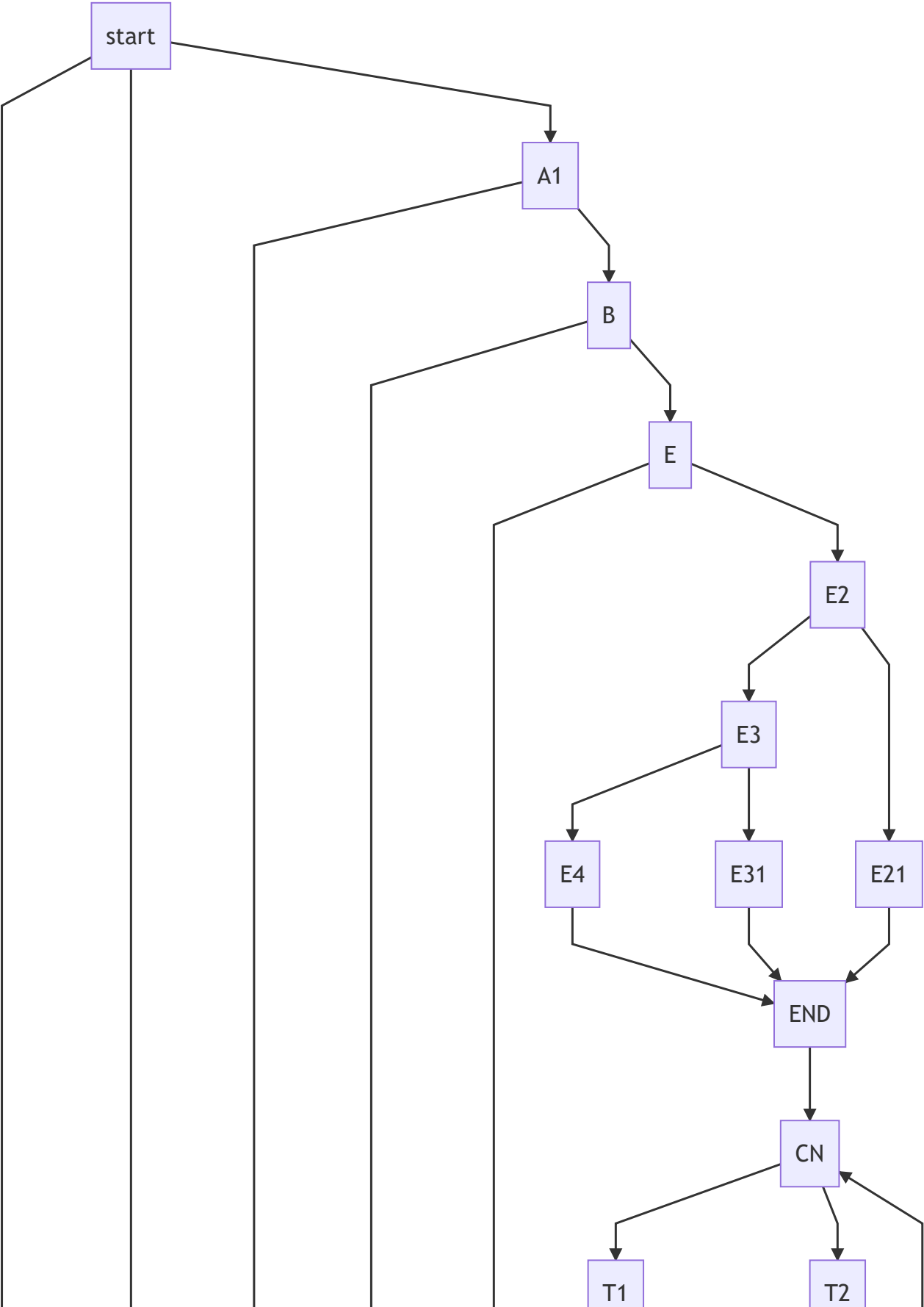
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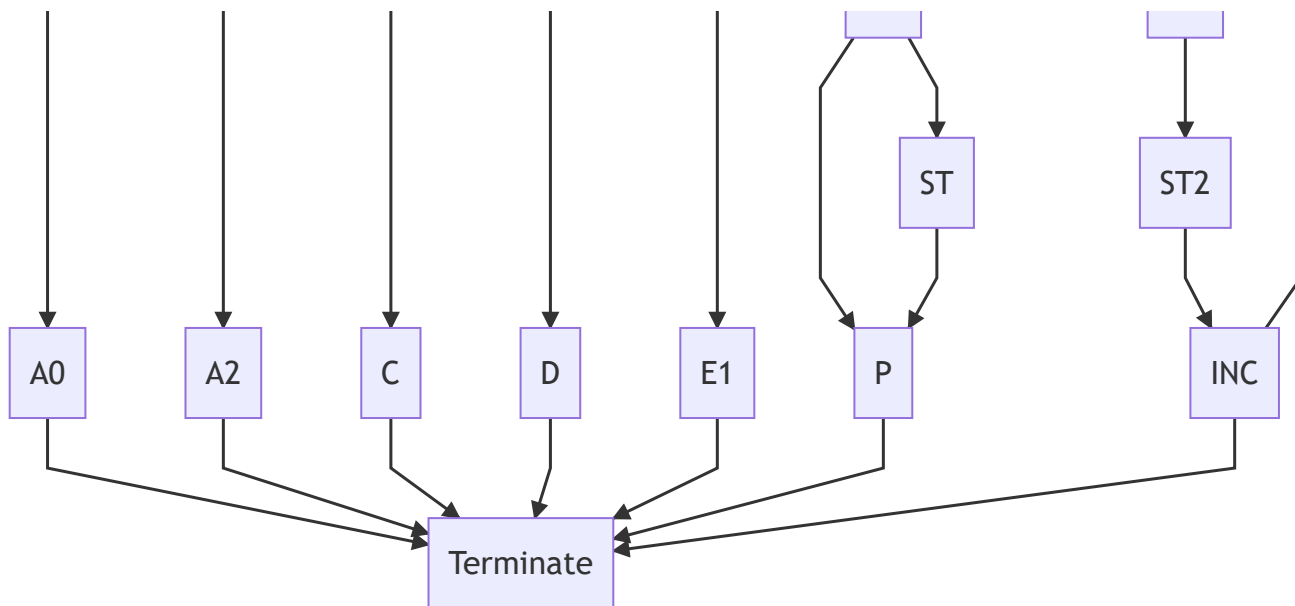
## Problem 1

Case	Description	Transaction input	Expected Output
1	Passed	39223 40 2 1 2.3 109	39223 40 109 119.25
2	Passed	39252 50 2 1 2 109	39223 50 109 139.75
3	Rejected $3 + 4 > 6$	39253 40 3 4 4 109	Size too large.
4	Rejected $60 > 50$	39229 60 2 1 2 108	Weight too large.
5	Rejected $6 > 3$	39225 20 6 1 2 103	Size too large.

Problem 2

- Graph





A0: NumberFormatException e1

A2: IOException e1

A1: income < 0

C: nFamilyMembers = Integer.valueOf(s).intValue();

D: IOException e

E: nFamilyMembers <= 0

E1: exit

E2: income < 10000

E21: taxTotal = 0.12 \* income;

E3: income < 50000

E31: taxTotal = 300.00 + 0.24 \* (income - 10000)

E4: taxTotal = 1500.00 + 0.36 \* (income - 50000)

CN: condition in the for loop and the last if

P: print

INC: i++

- Errors happen when entering numbers instead of strings. Some errors happened while using the online editor because of the file name.

- number of independent paths = 8

- Conditions for paths:

- income amount
- number of family members
- tax total

- Table for overview

Path	Condition
1	If income is less than 0 return to the start
2	If family members are less than 0 return to start
3	If income < 10000 and taxtotal >0
4	If income < 50000 and taxtotal >0
5	If income > 50000 and taxtotal >0
6	If income < 10000 and taxtotal <0
7	If income < 50000 and taxtotal <0
8	If income > 50000 and taxtotal <0

**- Test case for each path**

<b>Path</b>	<b>Income</b>	<b>Familynumber</b>	<b>Tax</b>	<b>start-over</b>
1	-5	300	15	T
2	5000	-5	16	T
3	4000	30	2	F
4	1400	313	5	F
5	81000	315	7	F
6	500	522	-4	F
7	45210	298	-9	F
8	91000	895	-15	F