

Example

(Sum of Subset Problem)

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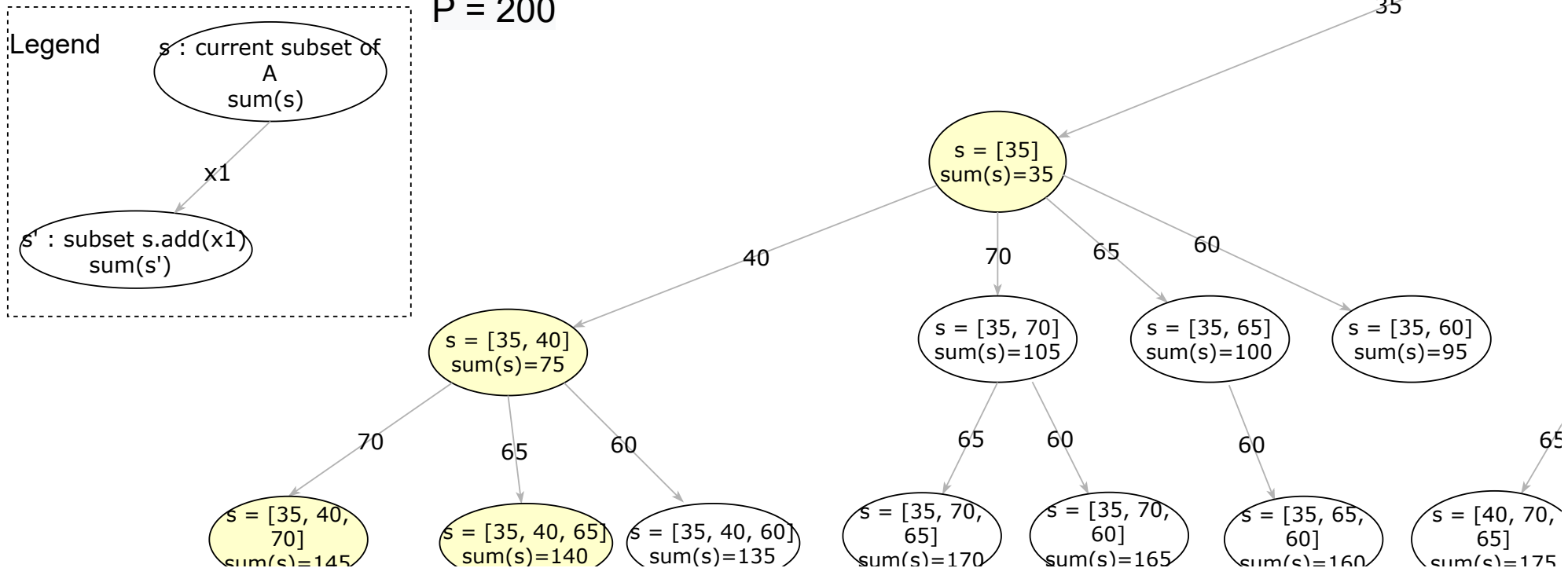
State-Space Search Method : Enumerating all subsets

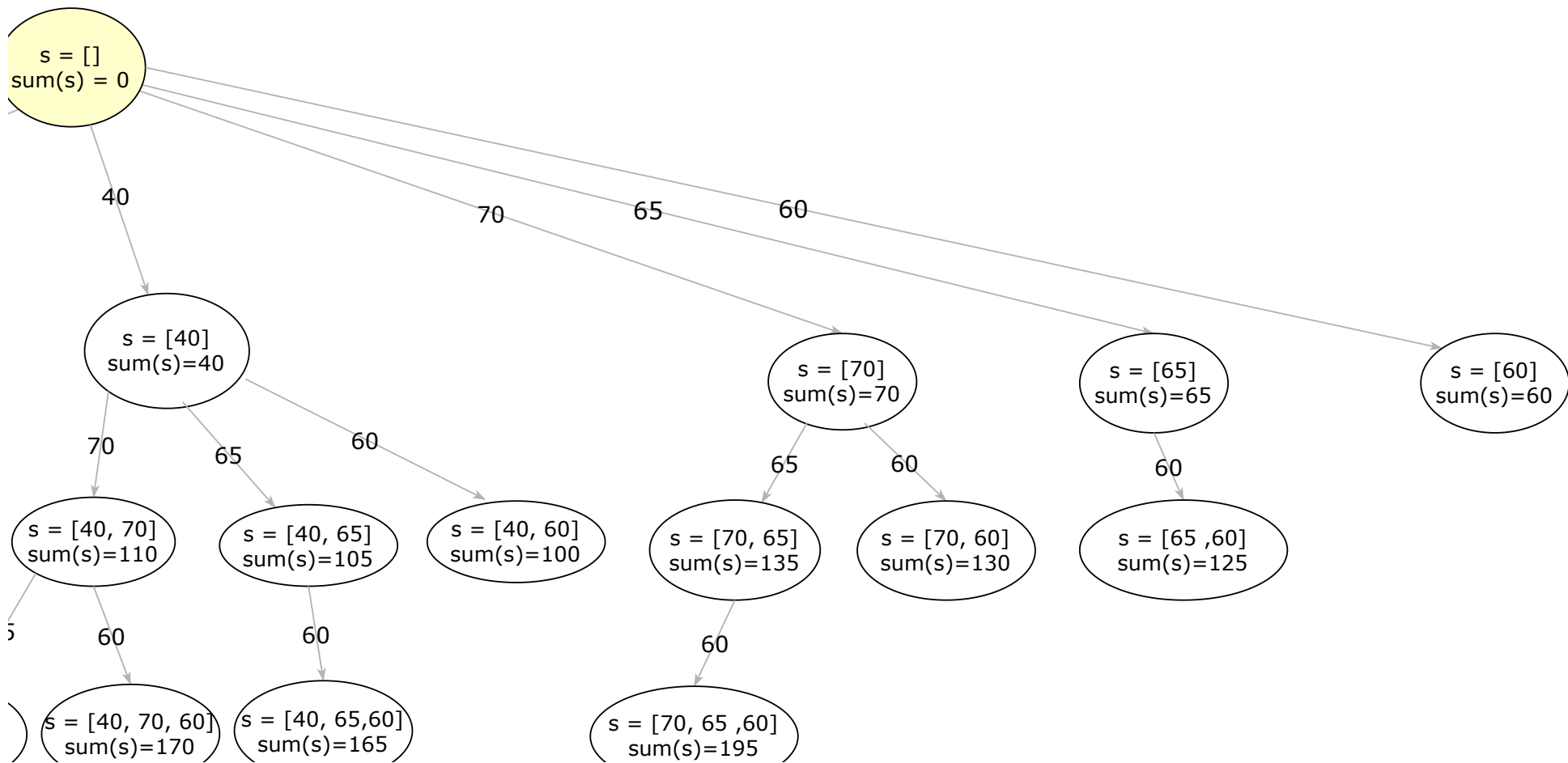
Problem:

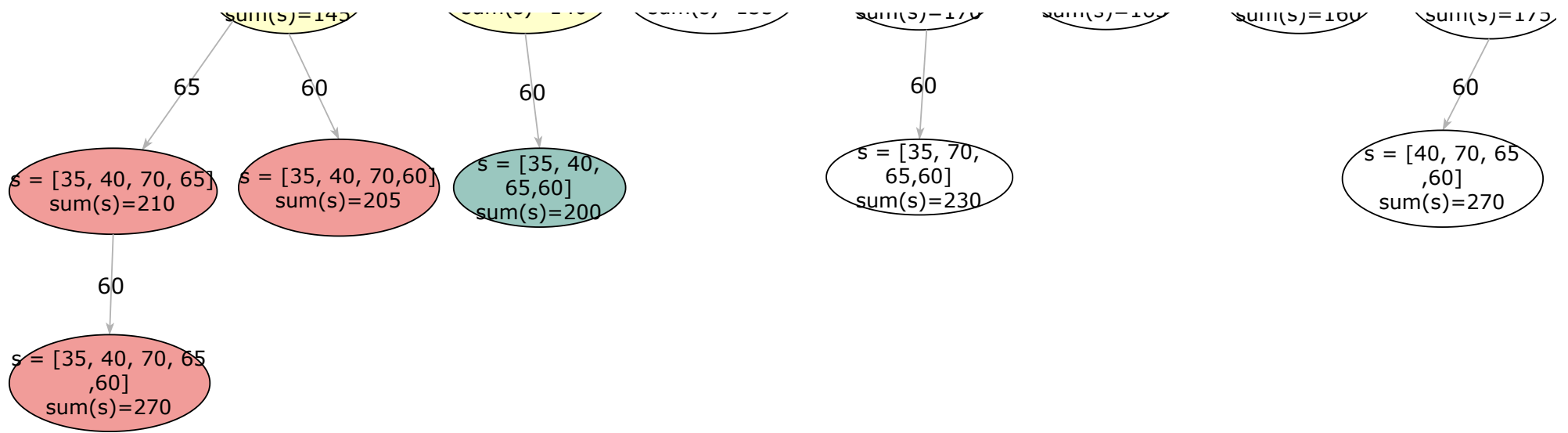
$A = [35, 40, 70, 65, 60]$

$P = 200$

State-Space Graph กราฟแสดงการค้นหาคำตอบ







Problem:

$A = [35, 40, 70, 65, 60]$

$P = 200$

ลำดับของการค้นหา

วิธีการ Depth-First Search

(pre-order processing: node-left-right)



- 1: [] sum = 0
- 2: [35] sum = 35
- 3: [35, 40] sum = 75
- 4: [35, 40, 70] sum = 145
- 5: [35, 40, 70, 65] sum = 210
- 6: [35, 40, 70, 65, 60] sum = 270
- 7: [35, 40, 70, 60] sum = 205
- 8: [35, 40, 65] sum = 140
- 9: [35, 40, 65, 60] sum = 200

จำนวนโหนดทั้งหมดที่ค้น = 9 โหนด

Example

(Sum of Subset Problem)

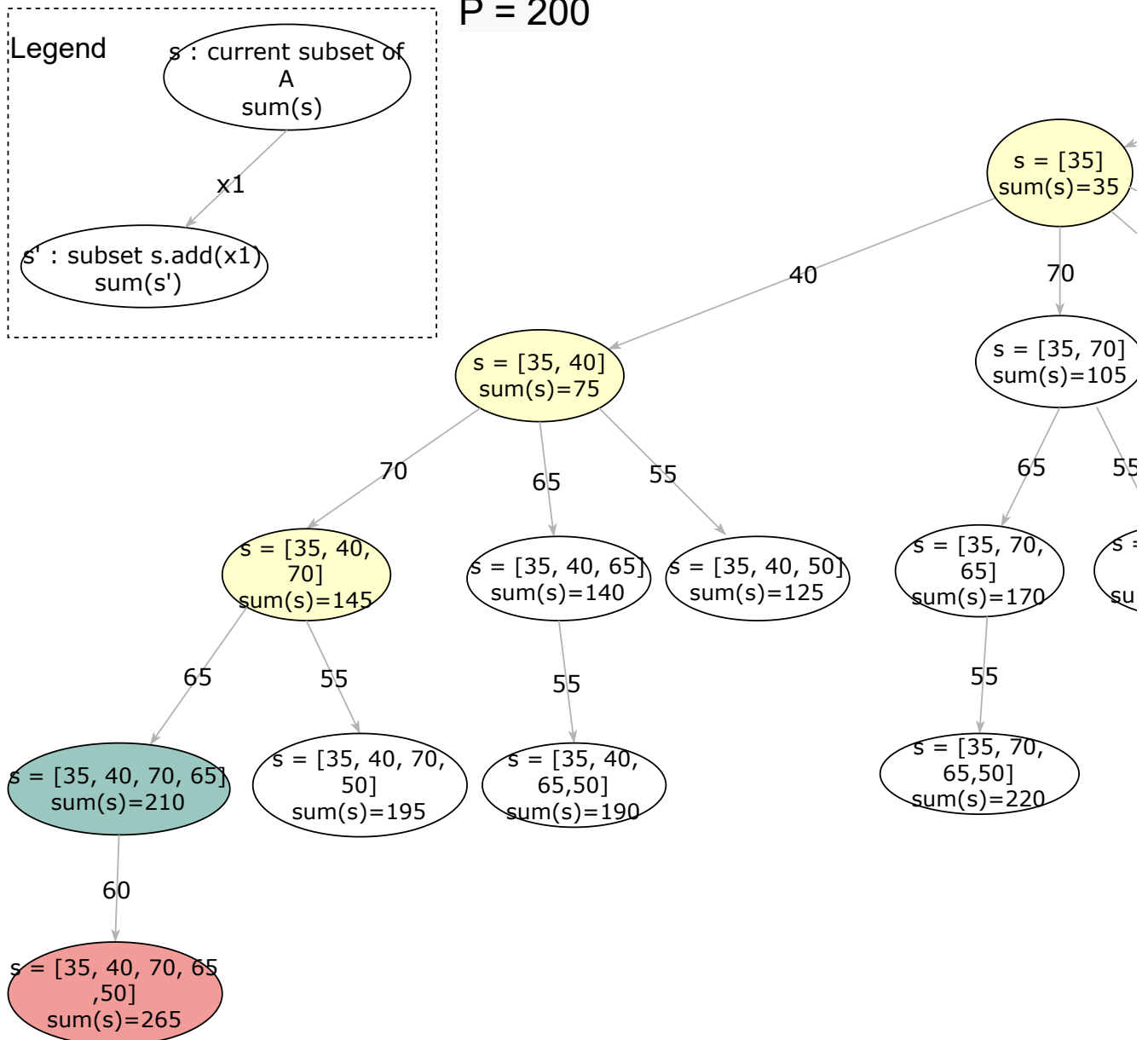
State-Space Search Method : Enumerating all subsets

State-Space Graph

Problem:

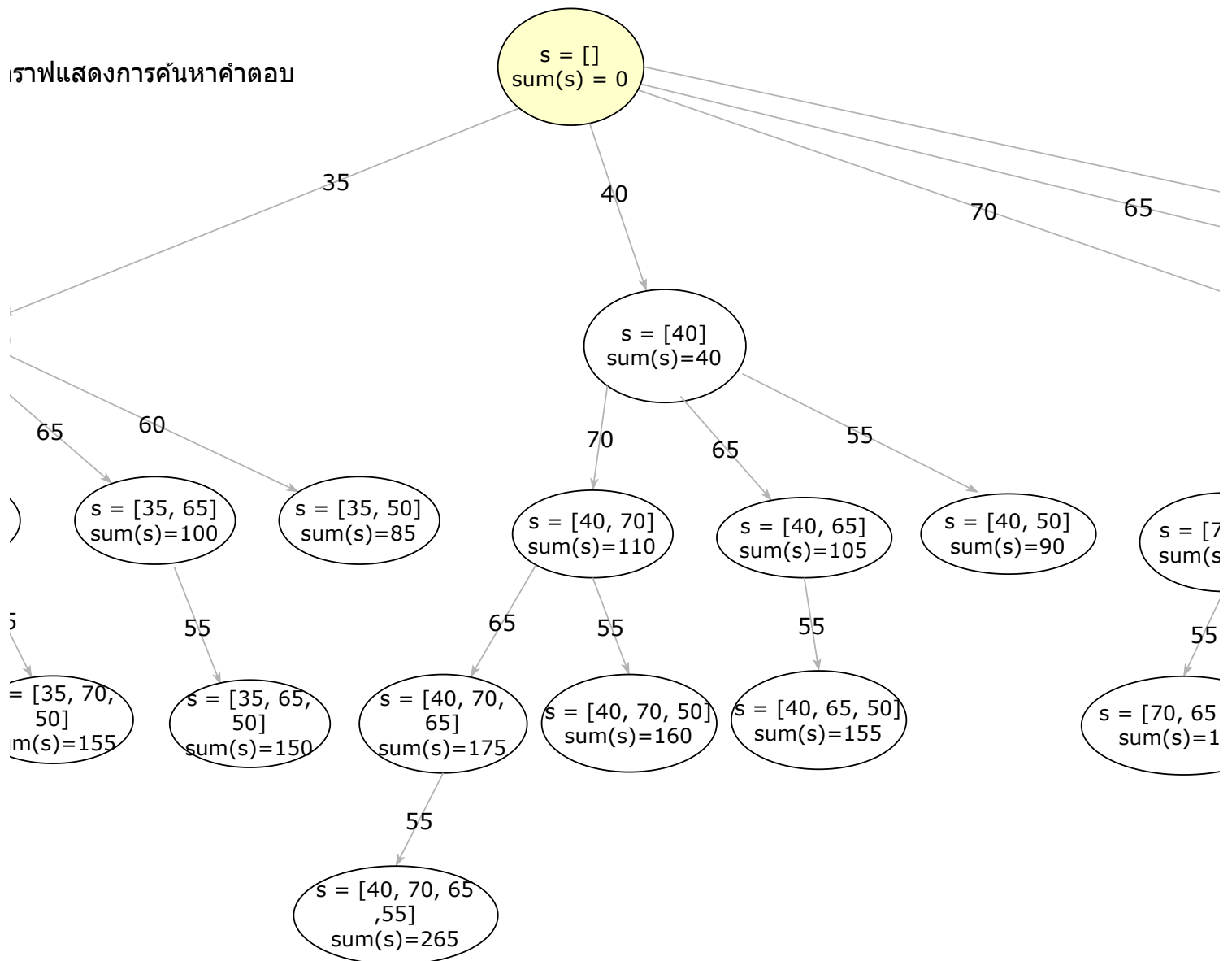
$A = [35, 40, 70, 65, 50]$

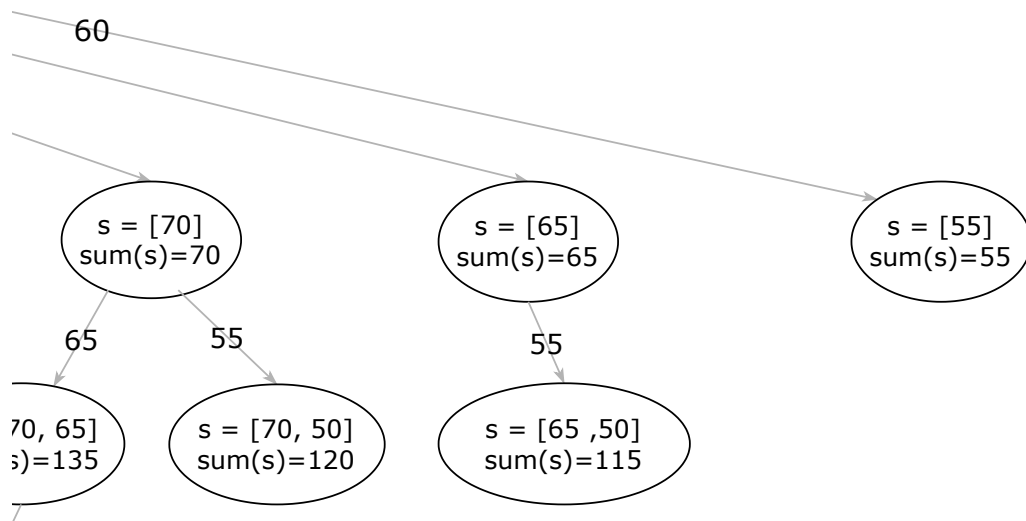
$P = 200$



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กราฟแสดงการค้นหาคำตอบ





,50]
.85

Problem:

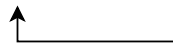
A = [35, 40, 70, 65, 55]

P = 200

ลำดับของการค้นหา

วิธีการ Depth-First Search

(pre-order processing: node-left-right)



1. [] (sum = 0)
2. [35] (sum = 35)
3. [35, 40] (sum = 75)
4. [35, 40, 70] (sum = 145)
5. **[35, 40, 70, 65] (sum = 210)**
6. [35, 40, 70, 65, 55] (sum = 270)
7. [35, 40, 70, 55] (sum = 225)
8. [35, 40, 65] (sum = 140)
9. [35, 40, 65, 55] (sum = 195)
10. [35, 40, 55] (sum = 130)
11. [35, 70] (sum = 105)
12. [35, 70, 65] (sum = 170)
13. [35, 70, 65, 55] (sum = 225)
14. [35, 70, 55] (sum = 160)
15. [35, 65] (sum = 100)
16. [35, 65, 55] (sum = 155)
17. [35, 55] (sum = 90)
18. [40] (sum = 40)
19. [40, 70] (sum = 110)
20. [40, 70, 65] (sum = 175)
21. [40, 70, 65, 55] (sum = 230)
22. [40, 70, 55] (sum = 165)
23. [40, 65] (sum = 105)
24. [40, 65, 55] (sum = 160)
25. [40, 55] (sum = 95)
26. [70] (sum = 70)
27. [70, 65] (sum = 135)
28. [70, 65, 55] (sum = 190)
29. [70, 55] (sum = 125)
30. [65] (sum = 65)
31. [65, 55] (sum = 120)
32. [55] (sum = 55)

โหนดที่เจอ = โหนดที่ 5