

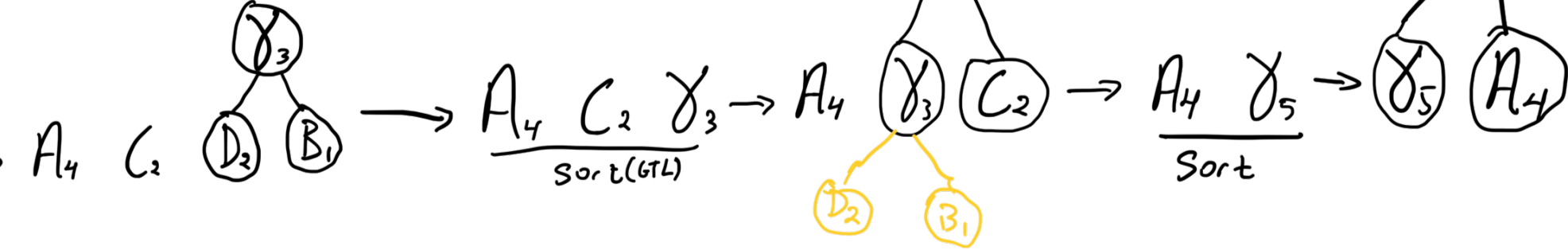
ABCDAAACDA

FREQUENCY

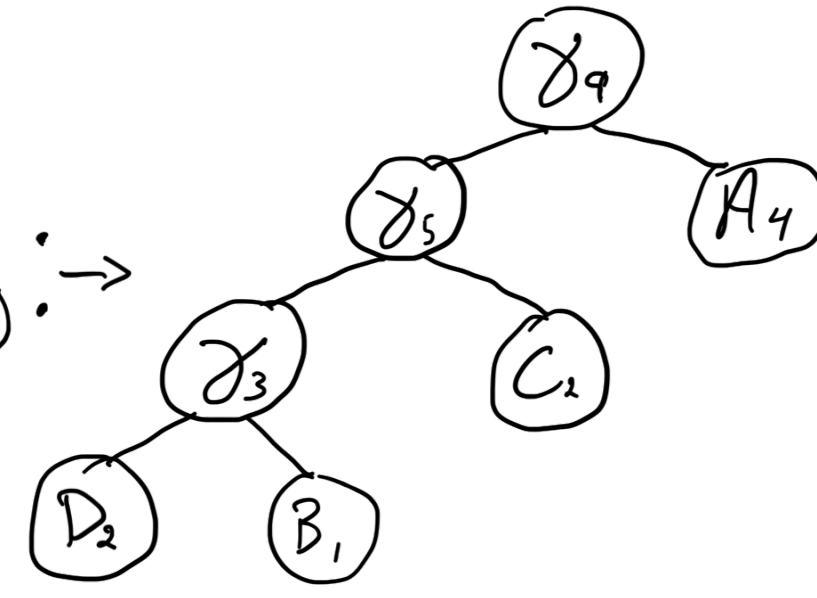
| A | B | C | D |
|---|---|---|---|
| 4 | 1 | 2 | 2 |

Sort (break tie to left):

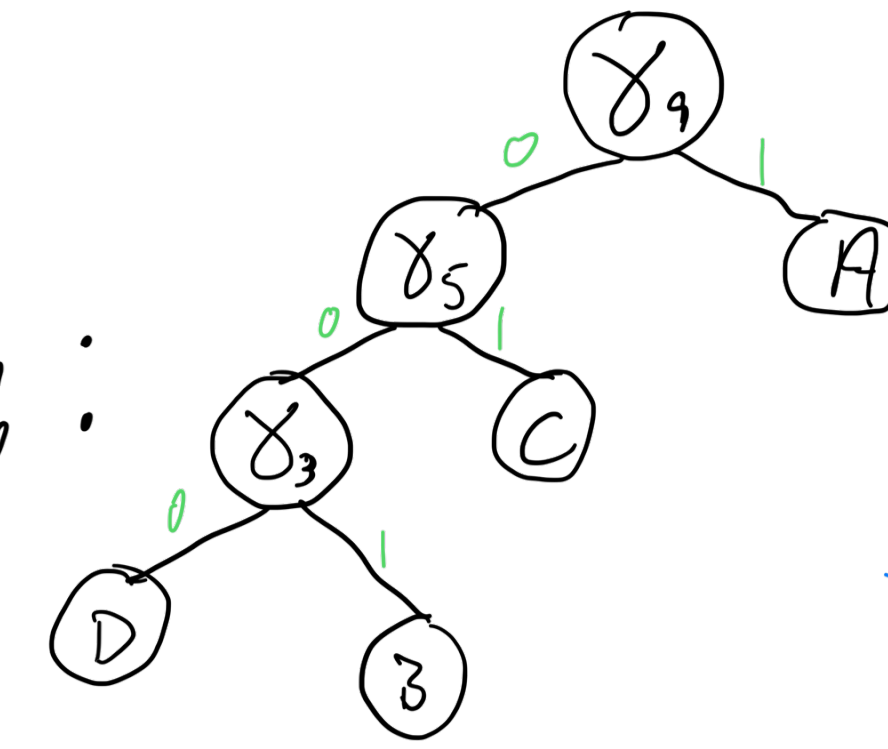
$A_4 C_2 D_2 B_1$
Priority Queue \nearrow



Draw the final tree (expand everything):



Remove the numbers from the lettered nodes.



| A | B | C | D |
|---|-----|----|-----|
| 1 | 001 | 01 | 000 |

| A | B | C | D | A | A | C | D | A |
|---|-----|----|-----|---|---|----|-----|---|
| 1 | 001 | 01 | 000 | 1 | 1 | 01 | 000 | 1 |

