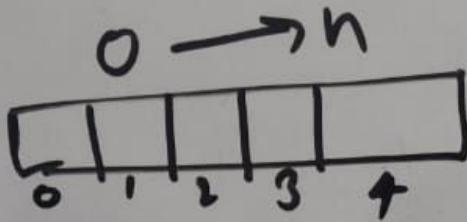


Board Path



→ Assume dice has 3 face
(1, 2, 3)

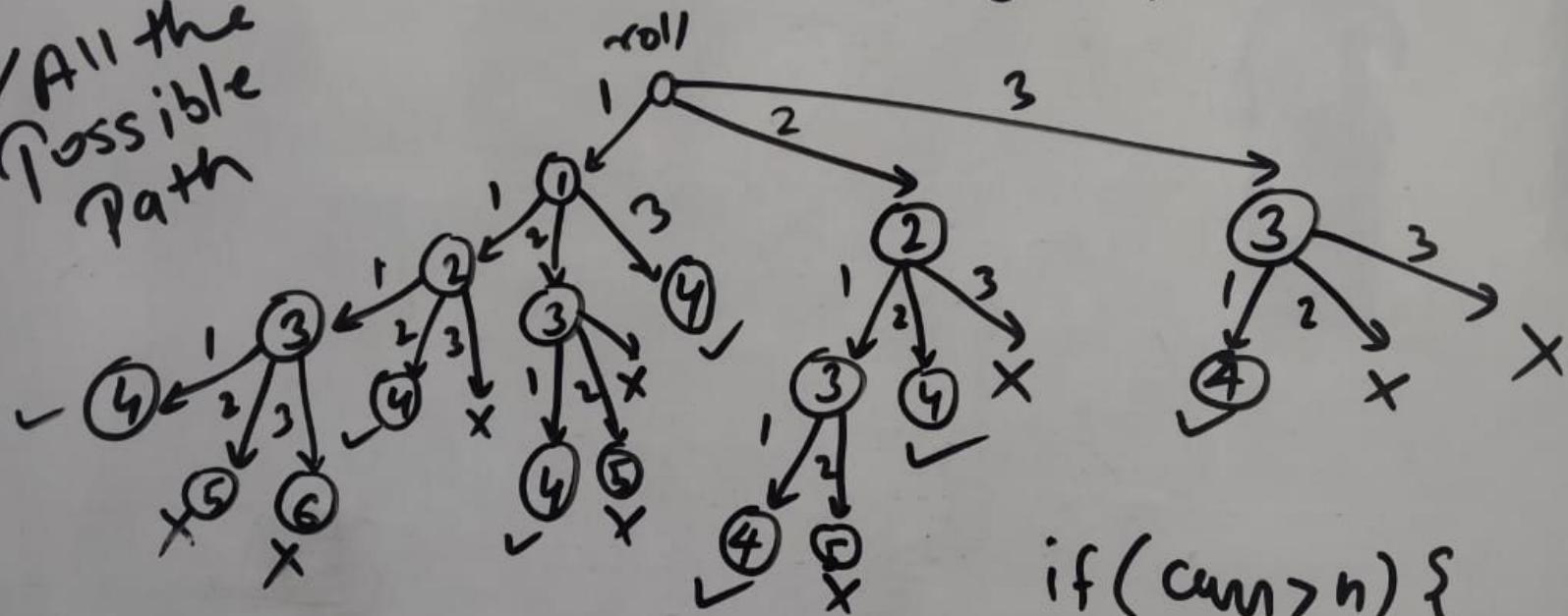
(1, 2, 3)

At every roll
max sum of dice faces ($3+2+1=6$)

A vertical list of binary strings:

- 111
- 112
- 121
- 13
- 211
- 22
- 31

To the right of the list, handwritten text reads "All the Possible Path". Below this, a path graph is shown starting at node 1. The path goes down to node 2, then left to node 4, then down to node 5, then right to node 3, and finally up to node 1.



if (cum == n) {

SYSO (ans) ;

return;

```
if (cum > n) {
```

→ return;

Permutation

$$\underline{bc} \left\{ \begin{array}{l} \underline{q} - - \\ \underline{q b c} \\ \underline{q c b} \end{array} \right. \quad \underline{ac} \left\{ \begin{array}{l} \underline{b} - - \\ \underline{b a c} \\ \underline{b c a} \end{array} \right. \quad \underline{cb} \left\{ \begin{array}{l} \underline{c} - - \\ \underline{c a b} \\ \underline{c b a} \end{array} \right.$$

3 calls \rightarrow

2 calls \rightarrow

1 call/s \rightarrow

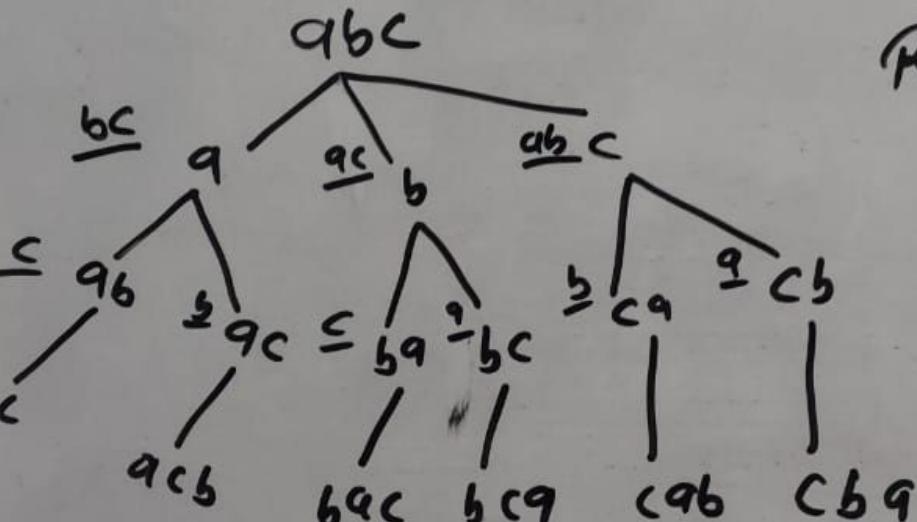
No calls \rightarrow

~~b a c c a b~~

if (que.length == 0) {

SOUT(ans);

} return;



Recursive call

depends on
the length of
the que (String)

=

Str → abcdef
0 1 2 3 4 5

Loop iteration

Question ($S_1 + S_2$)

Answer

char ch = que.charAt(i)

0

$$S_1 = - \quad S_2 = b c d e f \\ S_1 = \text{que.substring}(0, 1) \quad S_2 = \text{que.substring}(1) \\ S_1 + S_2 = b c d e f$$

ans + ch
↑
b

1

$$S_1 = a \quad S_2 = c d e f$$

ans + ch
↑
c

2

$$S_1 = a b \quad S_2 = d e f$$

ans + ch
↑
d

3

$$S_1 = a b c \quad S_2 = e f$$

ans + ch
↑
e

4

$$S_1 = a b c d \quad S_2 = f \\ S_1 + S_2 = a b c d f$$

ans + ch
↑
f

5

$$S_1 = a b c d e \quad S_2 = - \\ S_1 + S_2 = a b c d e$$