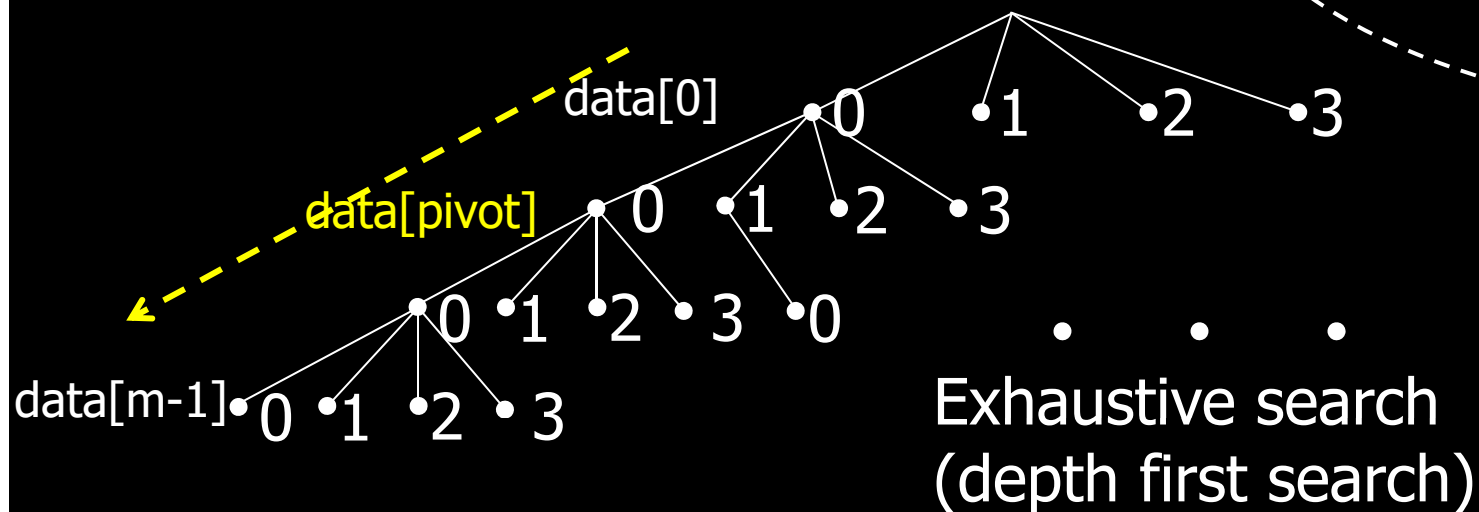


Recursive Counting Up



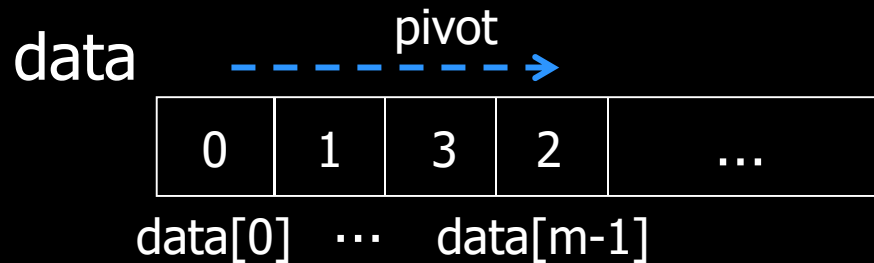
0	0	0	0
0	0	0	1
0	0	0	2
0	0	0	3
0	0	1	0
...	...	...	...
0	0	3	3
0	1	0	0
0	1	0	1
0	1	0	2
0	1	0	3
0	1	1	0
...	...	...	...
0	1	3	2
0	1	3	3
0	2	0	0
...	...	...	...
1	0	0	0
...	...	...	...
3	3	3	2
3	3	3	3

Recursive Counting Up

```

01 int main() {
02     int data[10];
03     countUp(4, data, 4, 0);
04     return 0;
05 }
06
07 void countUp(int n, int data[], int m, int pivot) {
08     if (pivot >= m)
09         print(data, m);
10     else
11         for (data[pivot] = 0; data[pivot] < n; data[pivot]++)
12             countUp(n, data, m, pivot + 1);
13 }

```



base

digits

the running digit

0	0	0	0
0	0	0	1
0	0	0	2
0	0	0	3
0	0	1	0
...	...	...	...
0	0	3	3
0	1	0	0
0	1	0	1
0	1	0	2
0	1	0	3
0	1	1	0
...	...	...	...
0	1	3	2
0	1	3	3
0	2	0	0
...	...	...	...
1	0	0	0
...	...	...	...
3	3	3	2
3	3	3	3