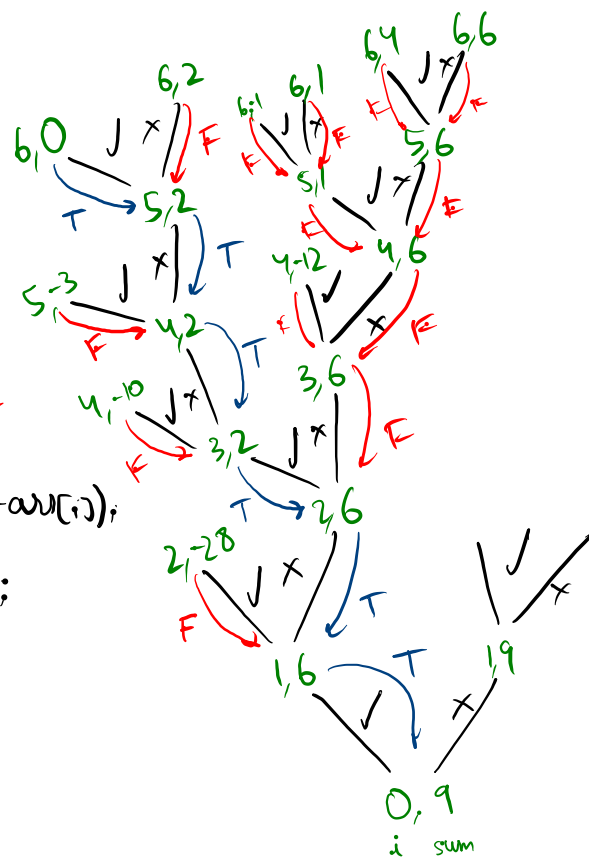


```
function recur(arr, i, sum) {
  if (sum == 0) return true
  if (sum < 0) return false
  if (i == arr.length) return false
}
```

```
boolean come = recur(arr, i+1, sum-arr[i]);
boolean dont = recur(arr, i+1, sum);
return come || dont;
```

3



$$\underline{2} \cdot \underline{2} \cdot \underline{2} \cdot \underline{2} \cdot \underline{2} \cdot \underline{2} = 2^n$$

2^n

0 1 2 3 4 5
Sum = 9

$\{3, 34, 4, 12, 5, 2\}$
 Steps = 9

	0	1	2	3	4	5	6	7	8	9
0										
1	T	F	F	F	F	F	F	F	F	F
34	T	F	F	T	F	F	F	T	F	F
4	T	F	F	T	F	F	T	F	F	F
5	F	F	F	T	T	T	T	T	T	T
2	F	F	T	T	T	T	T	T	T	T

Handwritten notes on the right: i-1, S-1, 11, i-1, S