

main gives First Call Line 26

subsets({1,2}, 2, 0, info)

Under subsets if statement not executed so $info[0] = 0$ Line 25
Second Call

Line 26 of 1st call subsets({1,2}, 2, 1, info) → {0}

Again if statement not executed $info[1] = 0$ Line 25
Third call

Line 26 of 2nd call subsets({1,2}, 2, 2, info) → {0,0}

Now if statement is executed & it calls print function, which runs the for loop and since both index of info is 0, so no result from for loop. So it prints empty as outcome of 3rd call

Now Line 26 in 2nd call prints empty and it proceeds to line 27 of 2nd call where it puts $info[ar-beg] = info[i] = 1$

Now it proceeds to line 28 of 2nd call

Fourth Call
subsets({1,2}, 2, 2, info)

again from $ar-beg+1$

from parent 2nd call

{0,1}

we might think we made $ar-beg$ as 2 in Line 26, but that isn't true it was only local for that time, however whole 2nd call as parent received $ar-beg=1$

Goes into if statement & calls print func. which goes through for loop & prints arr[i] i.e. 2 because $info[i] = 1$

So now the fourth call is answered which means Line 28 is executed. So the 2nd call is completed.

This means that line 26 of comp 1st call got completely executed and printed empty & 2.

Now we go to line 27 of 1st call which makes $info[0]=1$

↳ got 0 as value of ar - beg from parent class

And in line 28 fifth call is made $subsets(\{1,2\}, 2, 1, info)$

↓ ↳ $\{1,0\}$

So if statement of fifth call not satisfied line 25 is executed making $info[1]=0$

& sixth call made in line 26 of fifth call

↳ $subsets(\{1,2\}, 2, 2, info)$ ↳ $\{1,0\}$

If statement satisfied and print function called & prints $ar[0]$ i.e. 1 as $info[0]=1$

line 26 of fifth call answered move to line 27 of fifth call $info[1]=1$ & seventh call made at line 27 of 5th call

↳ $subsets(\{1,2\}, 2, 2, info)$ ↳ $\{1,1\}$

If ✓ → print func → prints $ar[0], ar[1]$ i.e. 1, 2

& line 28 of fifth call answered hence fifth call over & line 28 of 1st call over & hence all calls have been answered & recursion over