

Print Array

~~0~~ ~~x~~ ~~x~~ ~~3~~ ~~4~~ ~~5~~
↓ ↓ ↓ ↓ ↓
0 1 2 3 4

arr →

<u>3</u>	17	26	42	18	...
----------	----	----	----	----	-----

Size = n

void Print (int arr, int index, int n) {

if (index == n) {
 return;
}

int main() {

int arr[] = {1, 4, 6, 8, 7};

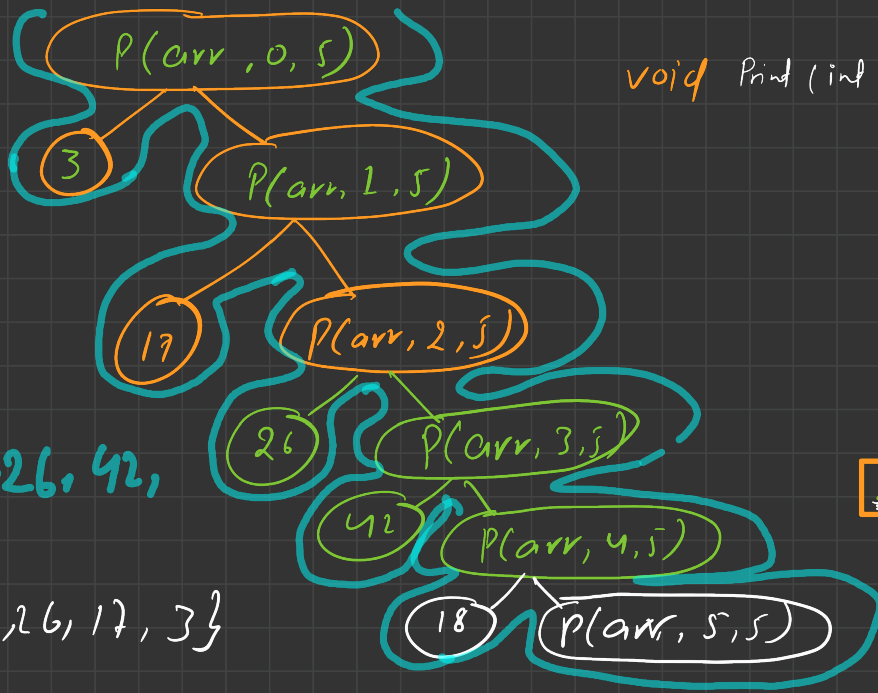
Print(arr, 0, sizeof arr)

}

cout << arr[index];

Print(arr, index+1, n);

}



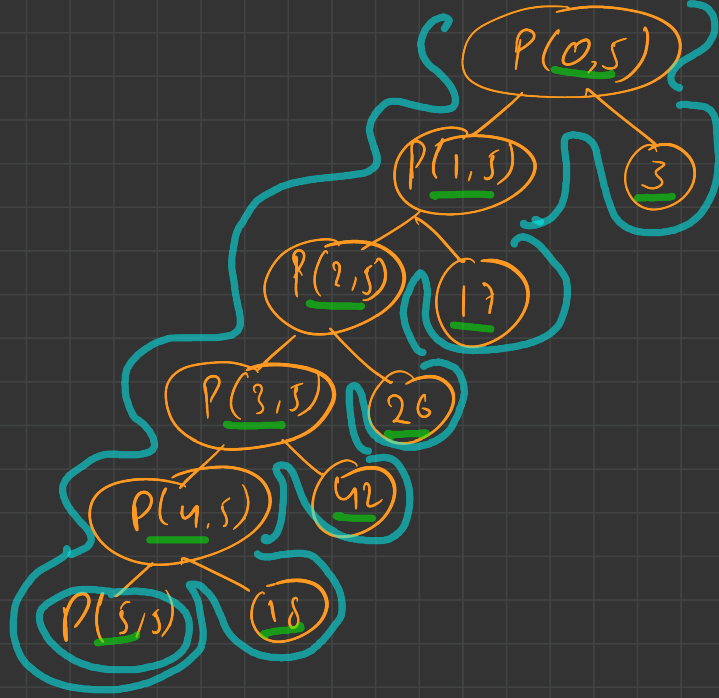
```

void Print (int arr , int index , int n ) {
    if ( index == n ) {
        return ;
    }
    → Print (arr, index+1, n );
    cout << arr [index];
}
  
```

3, 17, 26, 42,
18

0	1	2	3	4
<u>3</u>	17	26	42	18

{18, 42, 26, 17, 3}



18, 42, 26, 17, 3

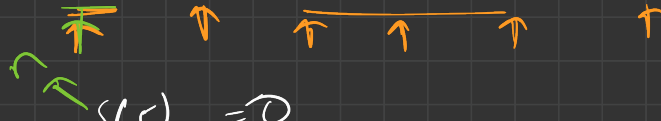
0	1	2	3	4
3	17	26	42	18

18, 42, 26, 17, 3

3, 17, 26, 42, 18

```
void Print(int arr, int index) {
    if (index == -1)
        return;
    Print(arr, index-1);
    cout << arr[index];
}
```

<u>Sum of All Element</u>					
↓	0	1	2	3	4
	8	2	5	4	3



$$s(5) = 0$$

$$s(4) = 3 + s(5)$$

$$s(3) = 4 + s(4)$$

$$s(2) = 5 + s(3)$$

$$s(1) = 2 + s(2)$$

$$s(0) = 8 + s(1)$$

ar

index 0

$$0 = 8 + 14 = 22$$

$$1 = 2 + 12$$

$$2 = 5 + 7$$

$$3 = 4 + 3 = 7$$

$$4 = 8 + 0 = 8$$

$$5 = 0$$

$$s(\text{index}) = \text{ar}[i] + \text{sum}(i+1)$$

```
int sum(int arr, int index, int n) {
```

```
    if (index == n) {
```

```
        return 0;
```

```
    }
```

```
    return arr[i] + sum(arr, index+1, n);
```

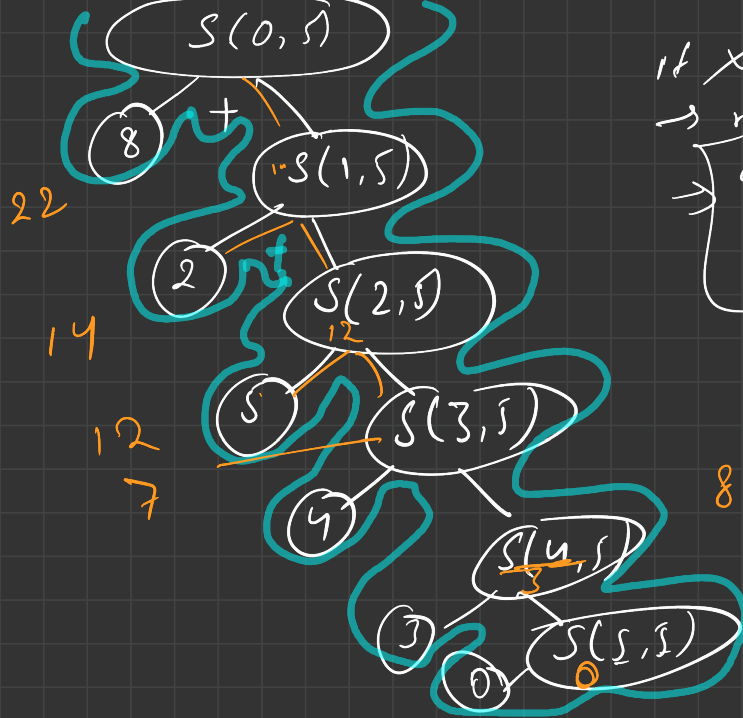
```
}
```

```
int main() {
```

```
    int ar = { 8, 2, 5, 4, 3 };
```

```
    cout << sum(ar, 0);
```

```
    8 + 2 + 5 + 4 + 3
```



```

if x
  → rch
  → arr[i] + sum(arr,
                  i+1, n)
  if (index == n)
    rch 0
  
```

$$8 + 2 + 5 + 4 + 3 + 0$$

```
sum(int arr, int i, int n) {
```

```
    if (i == n) {
```

```
        return 0
```

```
    }
```

```
    arr[i] + sum(arr, i+1, n);
```

```
}
```

0	1	2	3	4
7	4	6	2	1

```

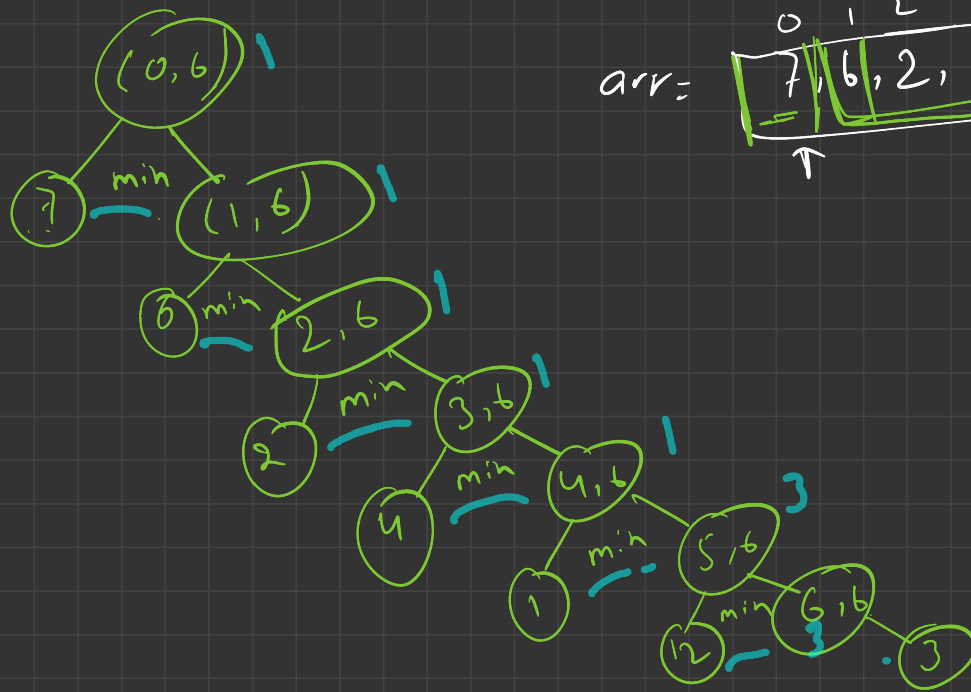
min element (int arr, int index) {
    if (index == n-1)
        return arr[index]

```

```

    return min (arr[index], min element (arr, i+1, n))
}

```

arr =

0	1	2	3	4	5	6
7	6	2	4	1	12	3

