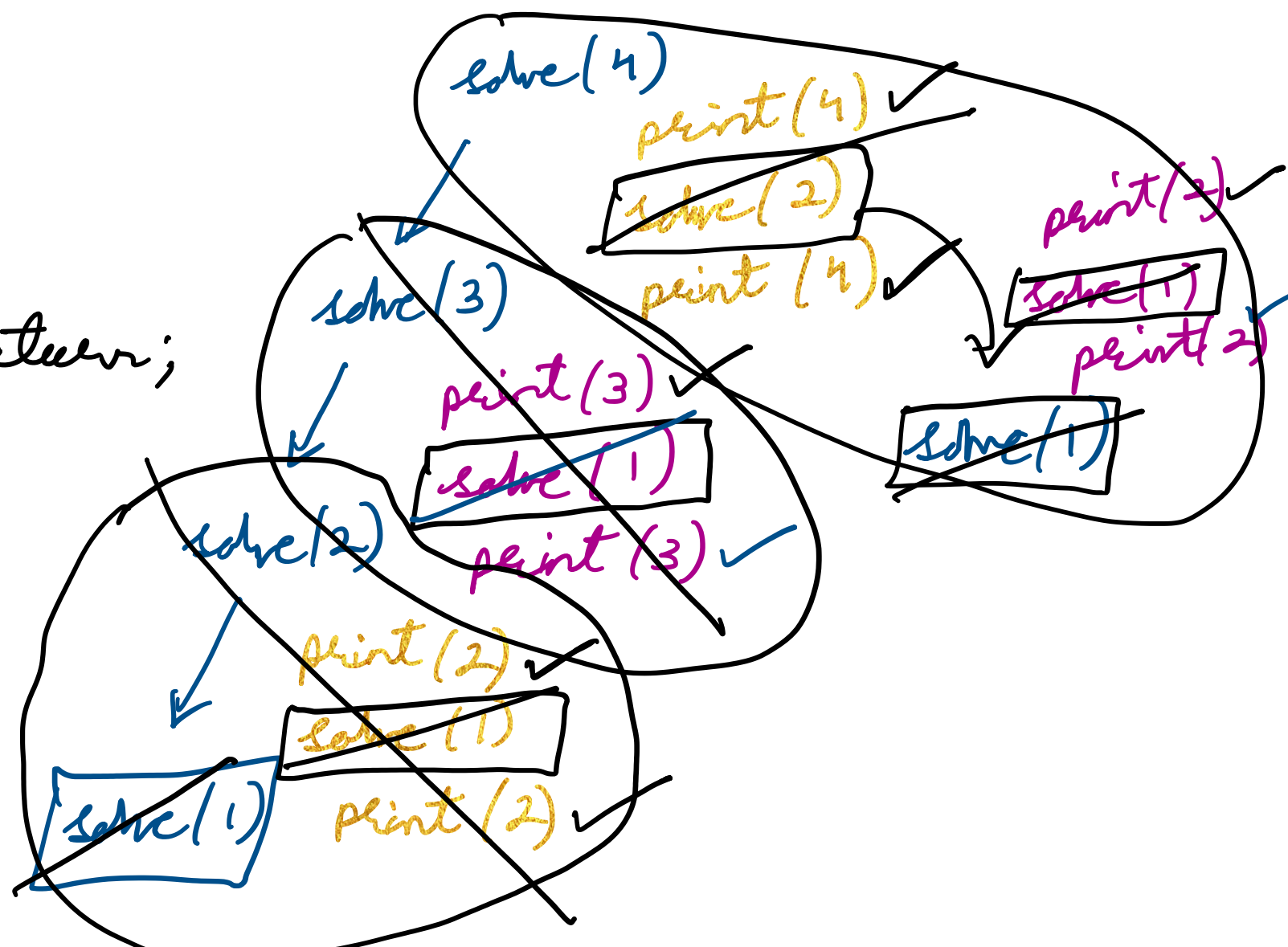


```
void solve(n) {
    if (n <= 1) return;
    print(n);
    solve(n-1);
    print(n);
    solve(n/2);
    print(n);
}
```



o/p → 4 3 2 2 2 3 3 4 2 2 2 4

$S \rightarrow [1, 2, 1, 3]$

$$\frac{4!}{2!} = 12$$

$$0 \leq A[i] \leq 10$$

freq → [0, 2, 1, 1] ind = 0
(4, [0, 0, 0, 0], 0)

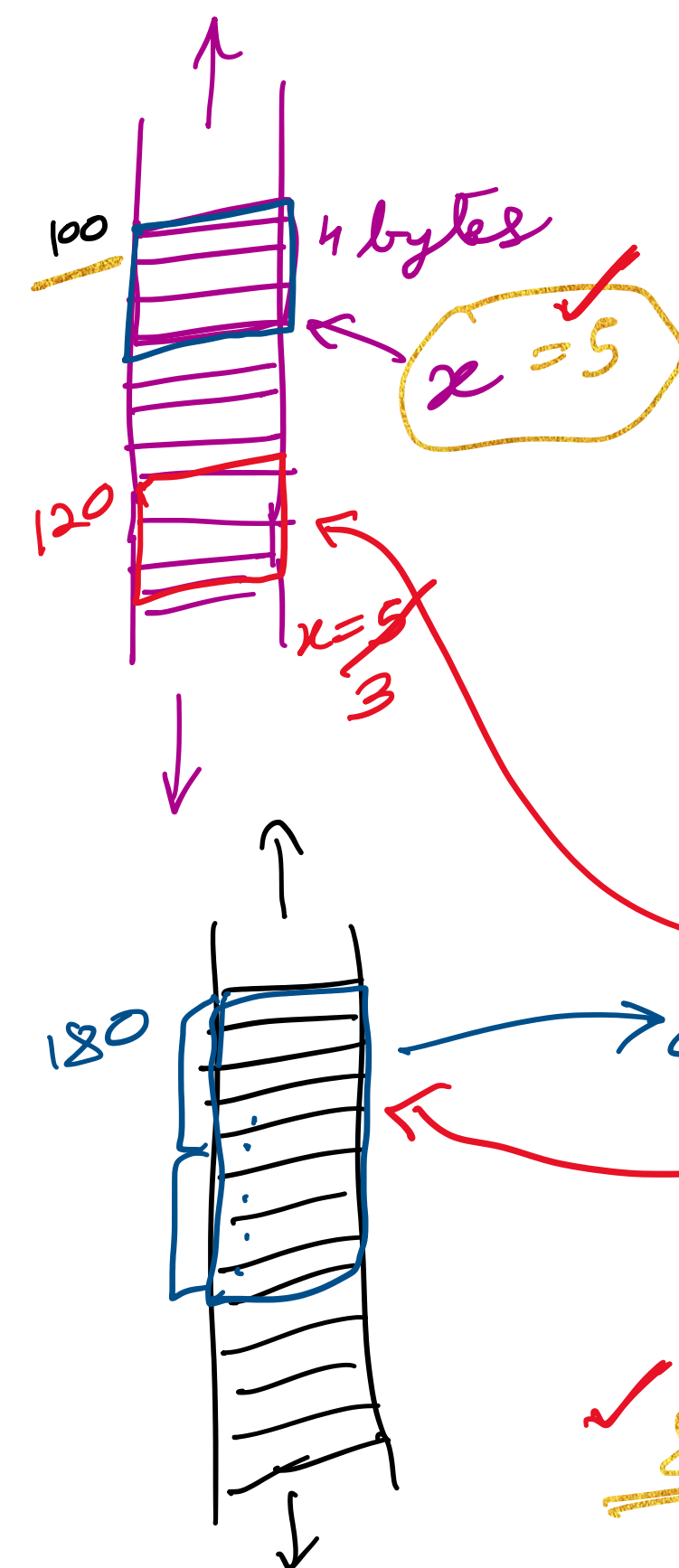
i = 1
[0, 1, 1, 1]
[0, 1, 0, 0] ans

(3, [0, 1, 1, 1], [1, 0, 0, 0], 1)
i = 1
i = 2, 3

(2, [0, 0, 1, 1], [1, 1, 0, 0], 2)
i = 2
i = 3

(1, [0, 0, 0, 1], [1, 1, 2, 0], 3)
i = 3
(0, [0, 0, 0, 0], [1, 1, 2, 3], 4)
i = 3

(1, [0, 0, 1, 0], [1, 1, 3, 0], 3)



main {
 solve(x)
 print(x);
}

pass by value

```
void solve(x) {
    print(x);
    x = 3;
}
```

```
void solve(a[]) {
    print(a[0]);
    a[0] = 8;
}
```

solve(a);
print(a[0]);

pass by reference

int
Integer x = 5

```
void solve(n) {
    if (n <= 1) return;
    for (i = 1; i <= 3; i++) {
        print(n * i);
        solve(n-1);
    }
}
```

3

o/p → 3 2

