

# [Java] ????? (??????? 25? 1? ??)

16. 다음 Java 코드를 읽고 빈칸에 알맞은 코드를 작성하시오.

```
public class Main {

    public static void main(String[] args) {
        int[] data = {3, 5, 8, 12, 17};
        System.out.println(func(data, 0, data.length - 1));
    }

    static int func(int[] a, int st, int end) {
        if (st >= end) return 0;
        int mid = (st + end) / 2;
        return a[mid] + Math.max(func(a, st, mid), func(a, mid + 1, end));
    }

}

public class Main {

    public static void main(String[] args) {
        int[] data = {3, 5, 8, 12, 17};
        System.out.println(func(data, 0, data.length - 1));
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    static int func(int[] a, int st, int end) {
        if (st >= end) return 0;
        int mid = (st + end) / 2;
        return a[mid] + Math.max(func(a, st, mid), func(a, mid + 1, end));
    }

}
```

□□□□

```
func(0,4)
|
├─ mid=2 → a[2]=8
|
├─ func(0,2)
|   ├─ mid=1 → a[1]=5
|   |
|   ├─ func(0,1)
|   |   ├─ mid=0 → a[0]=3
|   |   ├─ func(0,0) = 0
|   |   └─ func(1,1) = 0
|   |       └─ result: 3 + max(0,0) = 3
|   |
|   └─ func(2,2) = 0
|       └─ result: 5 + max(3,0) = 8
|
├─ func(3,4)
|   ├─ mid=3 → a[3]=12
|   ├─ func(3,3) = 0
|   ├─ func(4,4) = 0
|   └─ result: 12 + max(0,0) = 12
|
└─ □□ result: 8 + max(8,12) = 8 + 12 = 20
```

□□□ □□□□□ □□ ...

□□□ mid□ □□ start □□□ end □□ □□□□□ □□□□ □□□□ □□□□ □□□□

a□ □□□□□ □□□□ □□□□□ 2,3□□ □□□□□ □□□□ □□□ □□□□ □□□□ □□