

method that takes two  
ints and multiplies them  
without using \*

2 3  $\rightarrow$  6

2 0  $\rightarrow$  0

5 4  $\rightarrow$  20

// conditional logic for 0

// multiplication is repeated addition

// positive

// small n

---

```
public int multiply (int x, int y) {  
    if (x == 0 || y == 0 || x < 0 || y < 0) {  
        return 0;  
    }  
    int sum = 0;  
    for (int i = 0; i < y; i++) {  
        sum = sum + x;  
    }  
    return sum;  
}
```

}

~~remove duplicates~~

if list is null?

→ null

// if 3 copies?

{ 3, 3, 3 } → { 3 }

{ 1, 2, 2, 3 } → { 1, 2, 3 }

{ 2 } → { 2 }

```
public List<Integer> elimDups(List<Integer> list) {  
    // check null
```

```
    Set<Integer> nums = new HashSet<>();  
    List<Integer> result = new ArrayList<>();
```

```
    for (int x : list) {  
        if (!nums.contains(x)) {  
            // do nothing  
        } else {
```

```
            nums.add(x);
```

```
            result.add(x);
```

}  
}

- , ~ ~ ~

return resultj