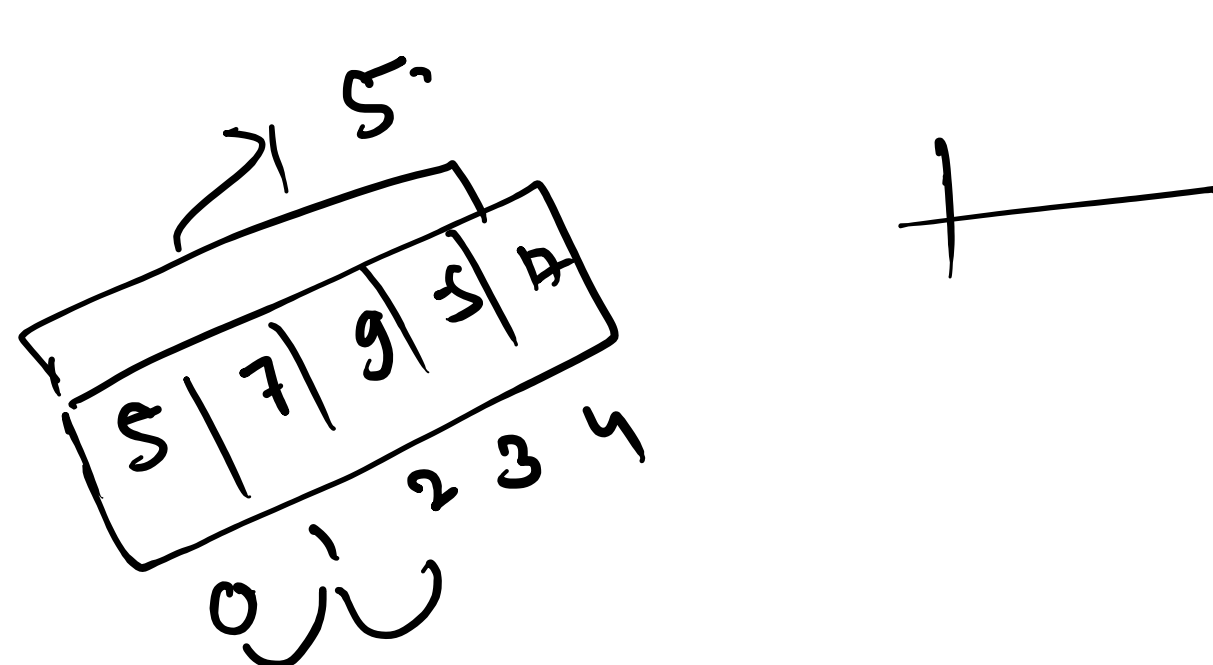
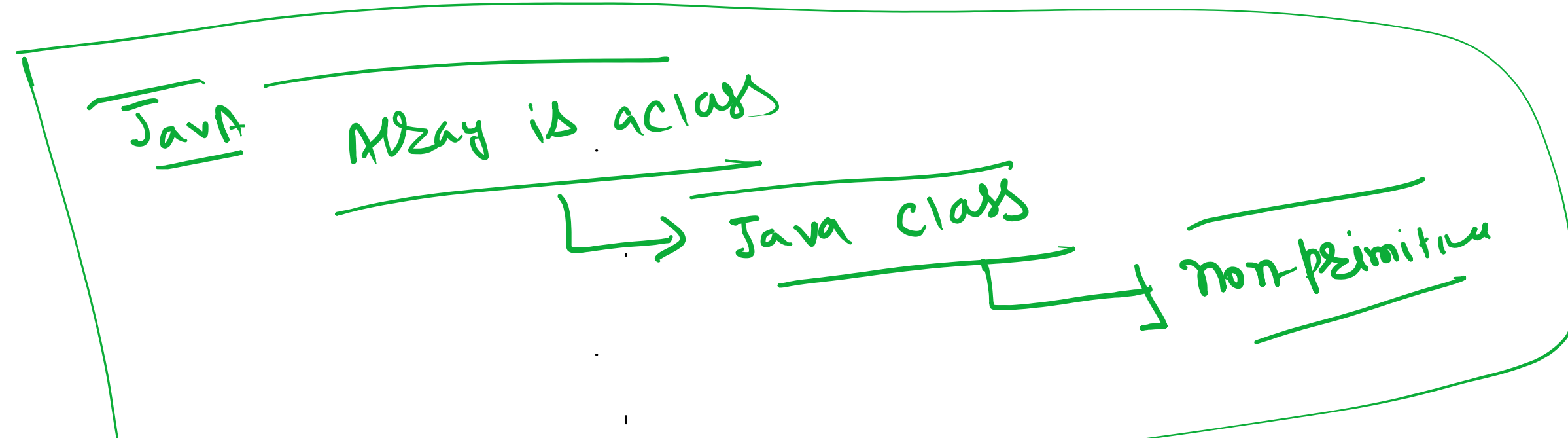
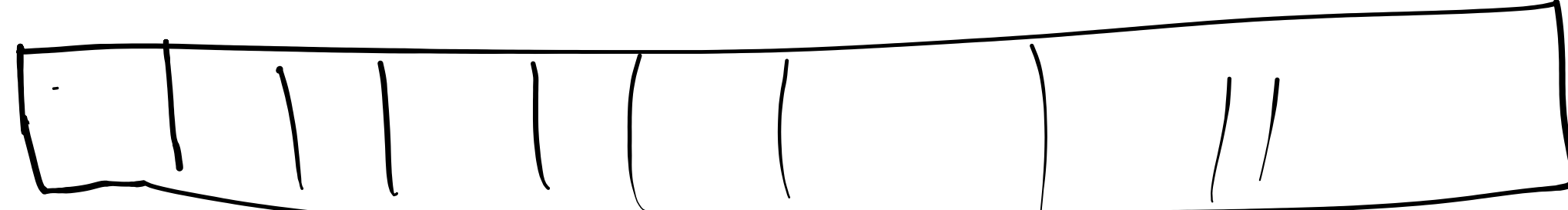


```
int a1 = 5 ✓
int a2 = 2
int a3 = 9
int a4 = 1
int a5 = 7
```

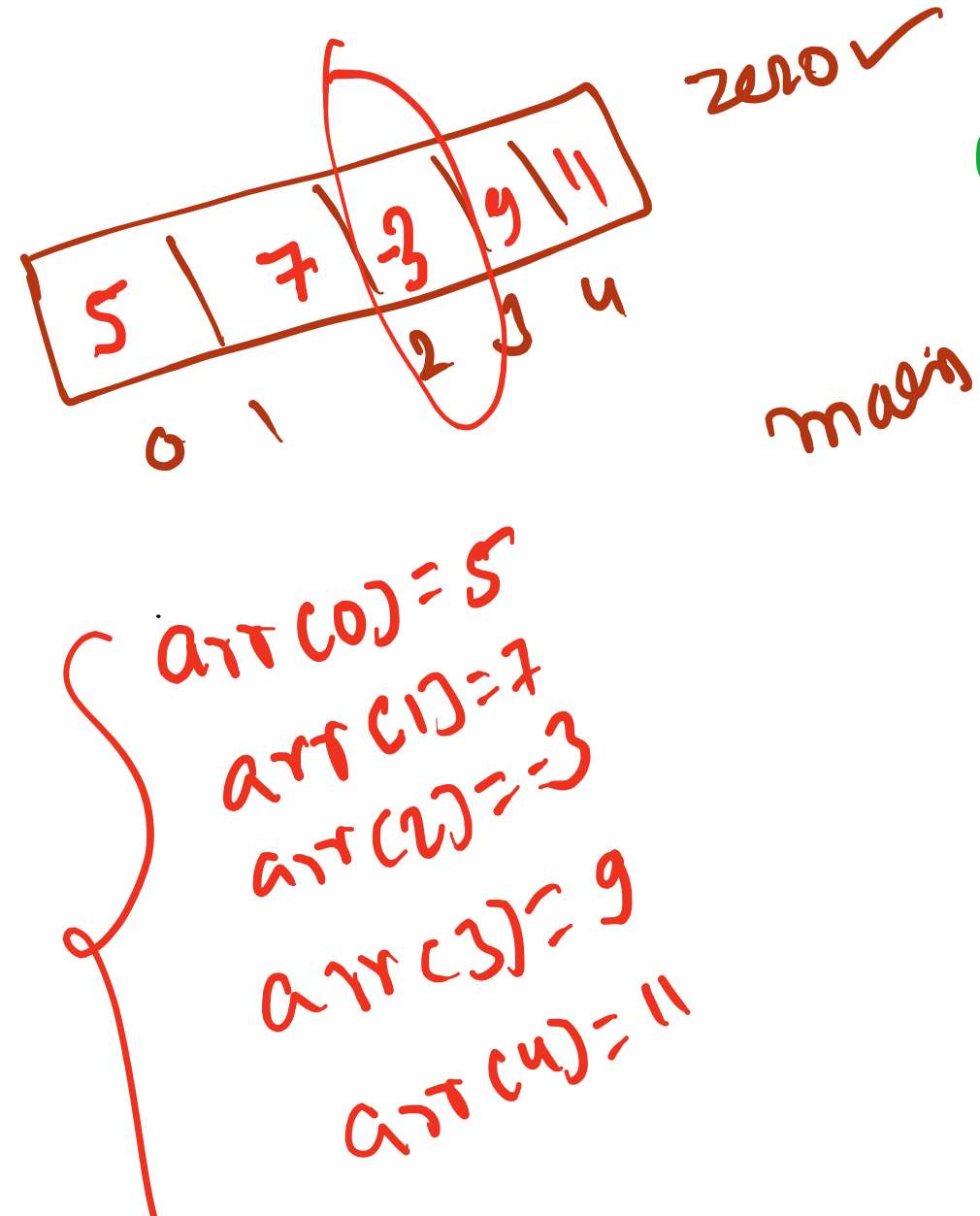
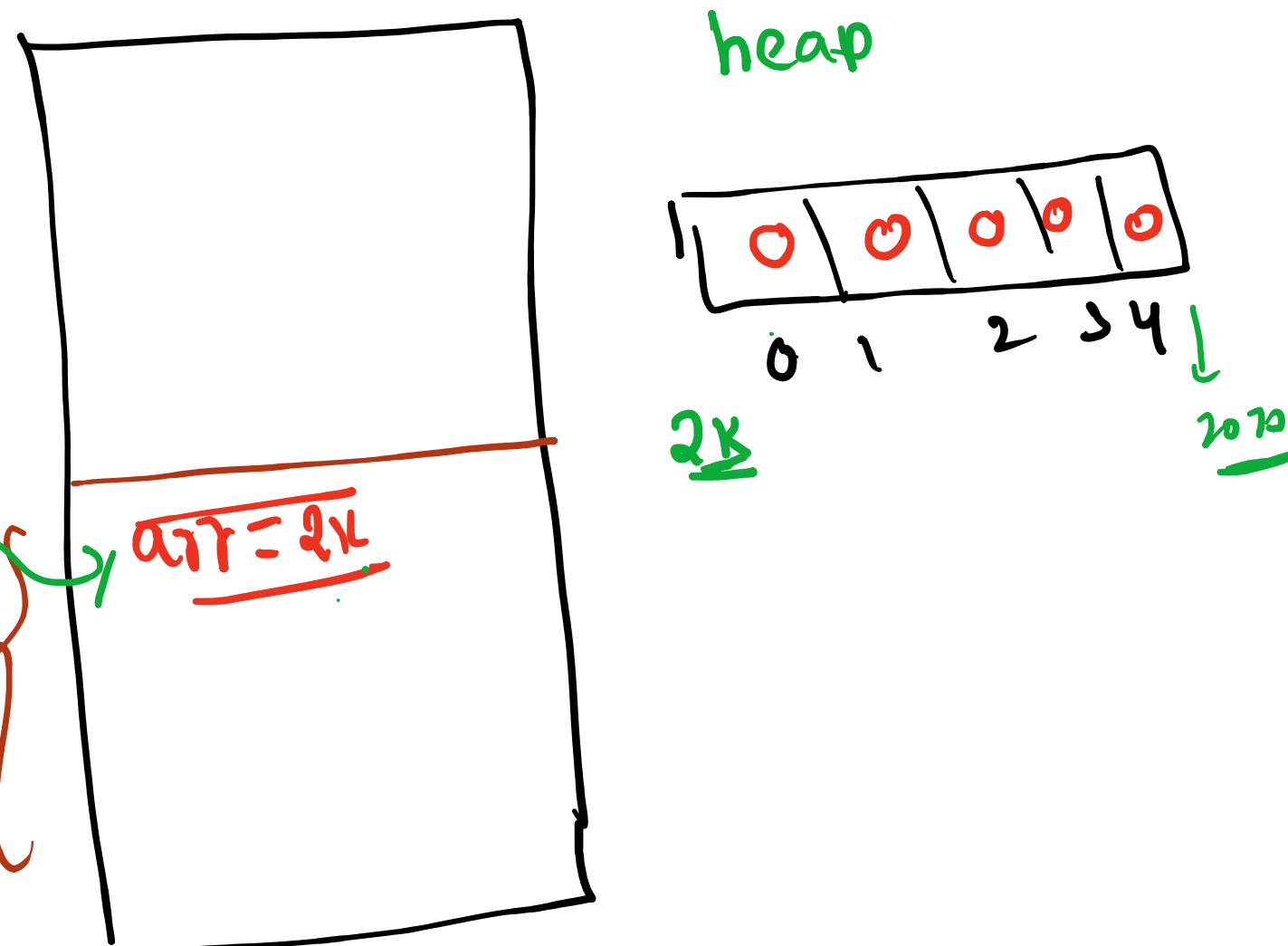


~~1786~~

$$100 \times 4 \text{ byte} = \underline{\underline{400 \text{ byte}}}$$

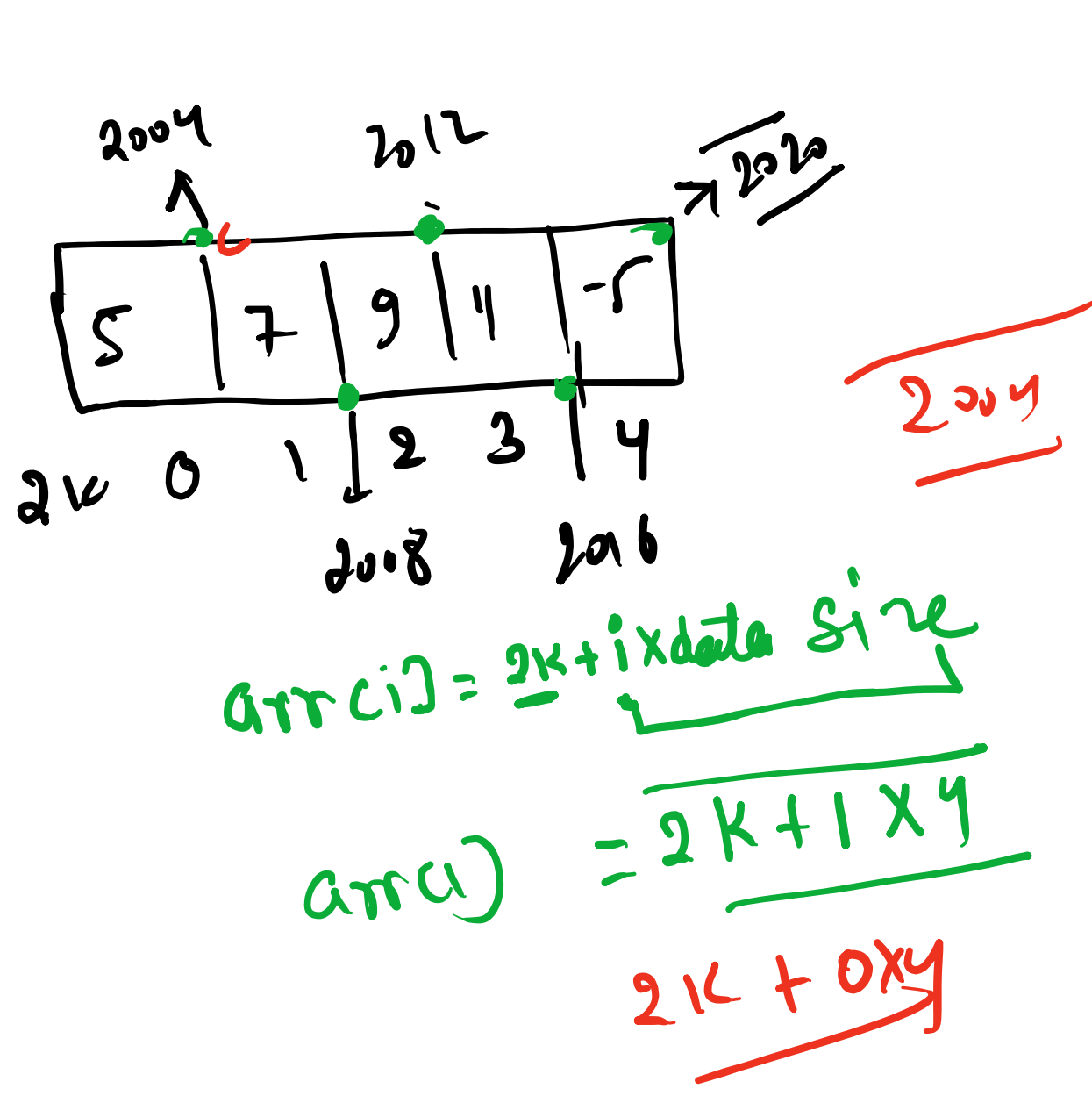


```
public static void main(String[] args) {
    // TODO Auto-generated method stub
    int []arr = new int[5];
}
```



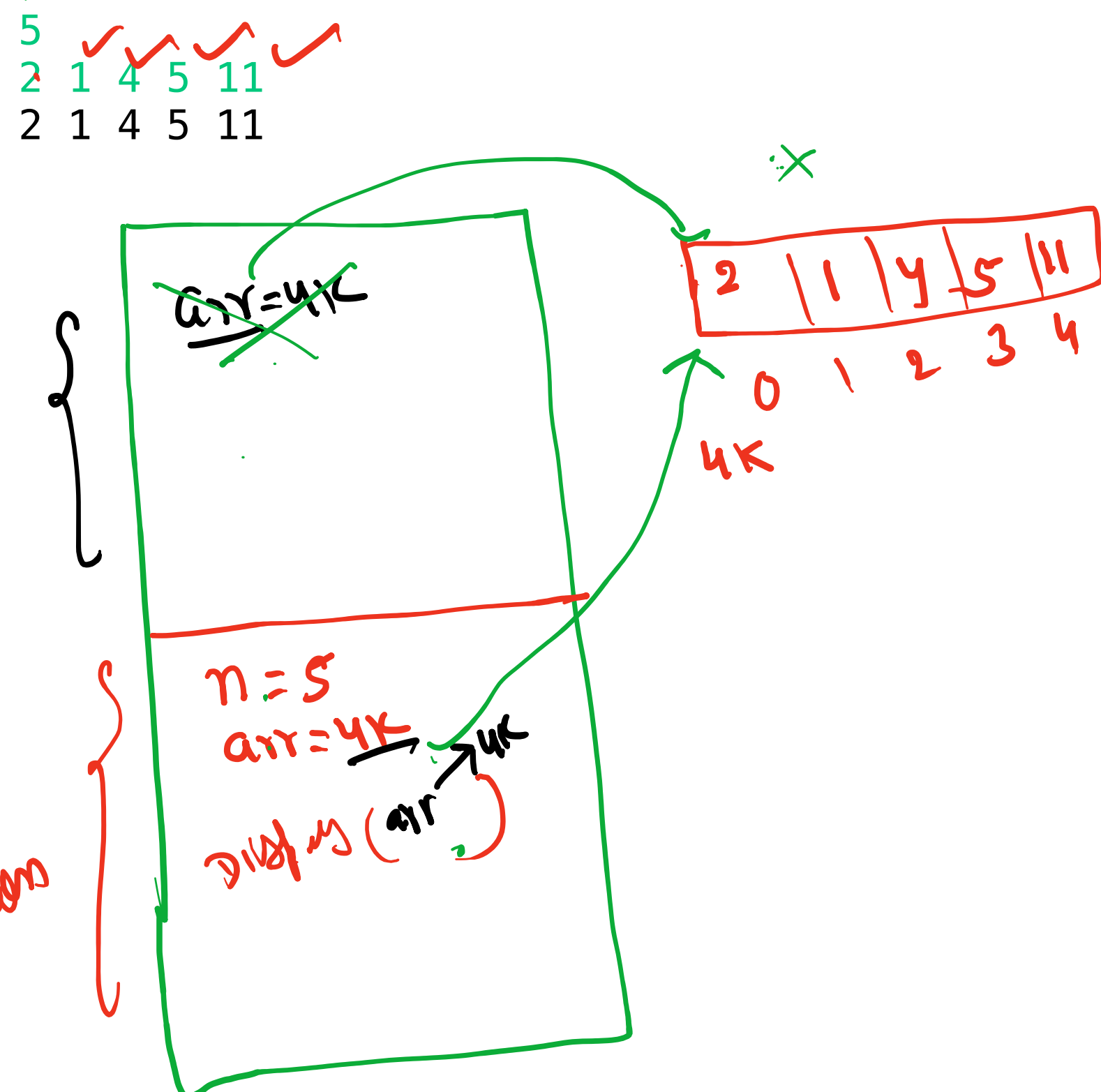
$S \rightarrow 0.4y$

```
public static void main(String[] args) {
    // TODO Auto-generated method stub
    int[] arr = new int[5];
    System.out.println(arr);
    // set
    arr[0] = 5;
    arr[1] = 7;
    arr[2] = 9;
    arr[3] = 11;
    arr[4] = -5;
    // print
    System.out.println(arr[0]);
    System.out.println(arr[1]);
    System.out.println(arr[2]);
    System.out.println(arr[3]);
    System.out.println(arr[4]);
    int[] other = arr;
}
```

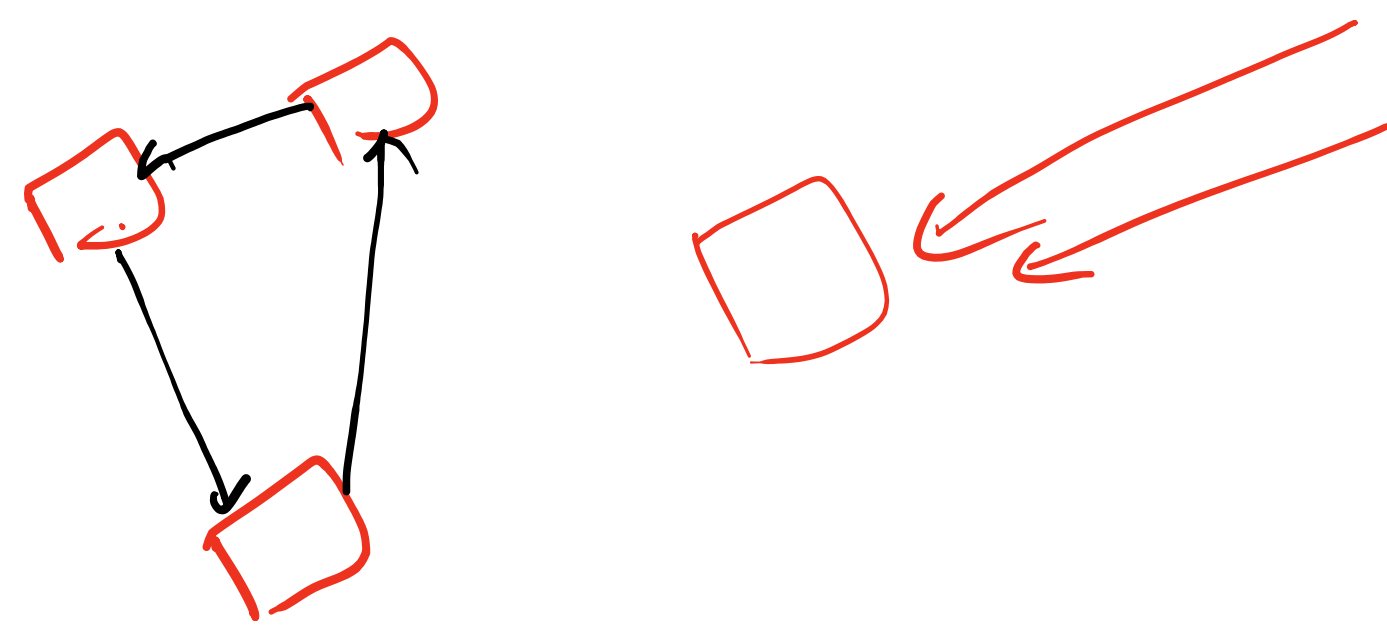


```
public class Input_and_Display {
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt(); // array ka length
        int[] arr = new int[n];
        for (int i = 0; i < arr.length; i++) {
            arr[i] = sc.nextInt();
            Display(arr);
        }

        public static void Display(int[] arr) {
            for (int i = 0; i < arr.length; i++) {
                System.out.print(arr[i] + " ");
            }
        }
    }
}
```

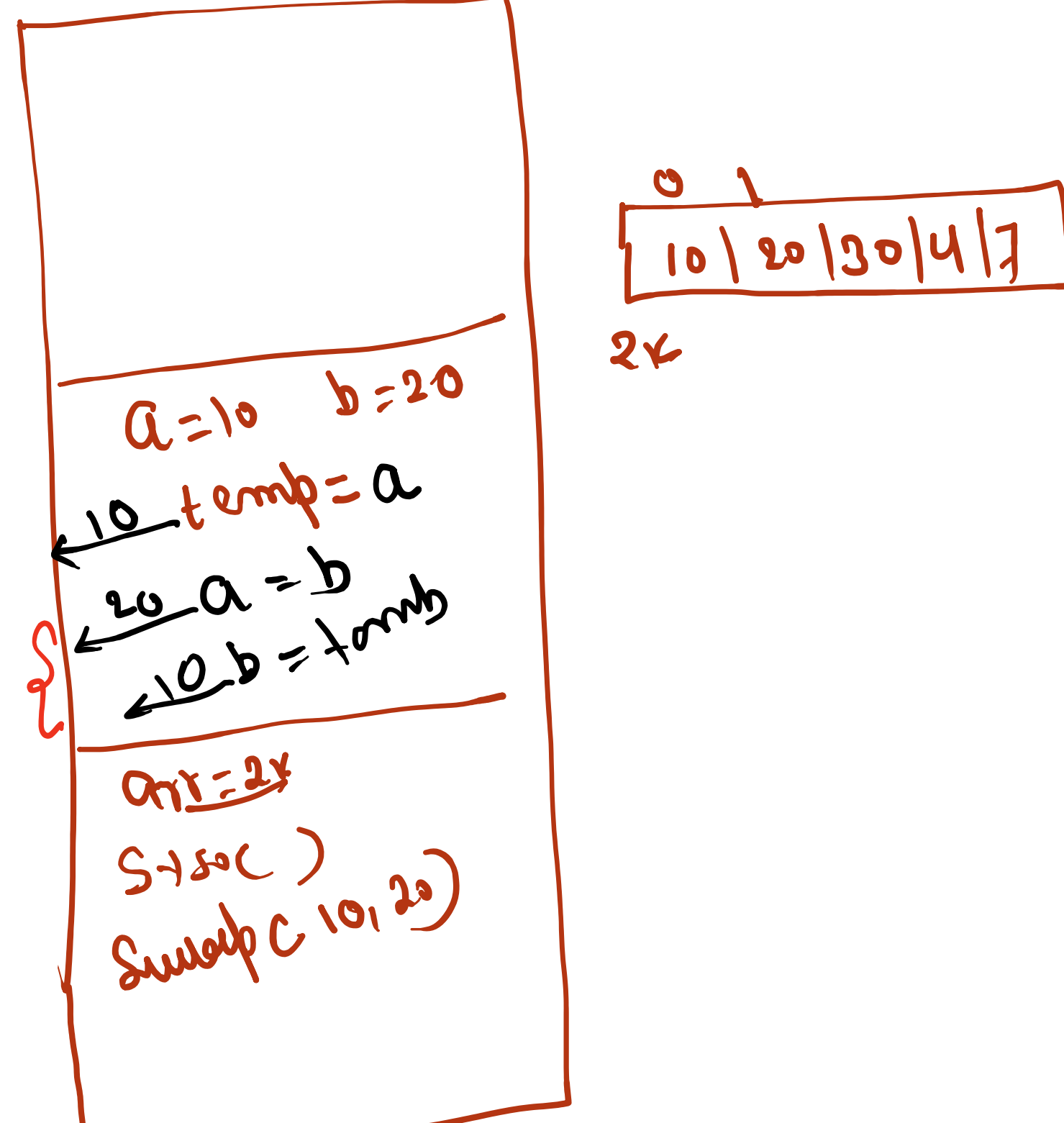


$\left[ \begin{array}{l} a=5 \rightarrow 7 \\ b=7 \rightarrow 5 \end{array} \right]$


$$\begin{aligned} & s \leftarrow temp = a \\ & a \leftarrow b \\ & b \leftarrow temp \end{aligned}$$

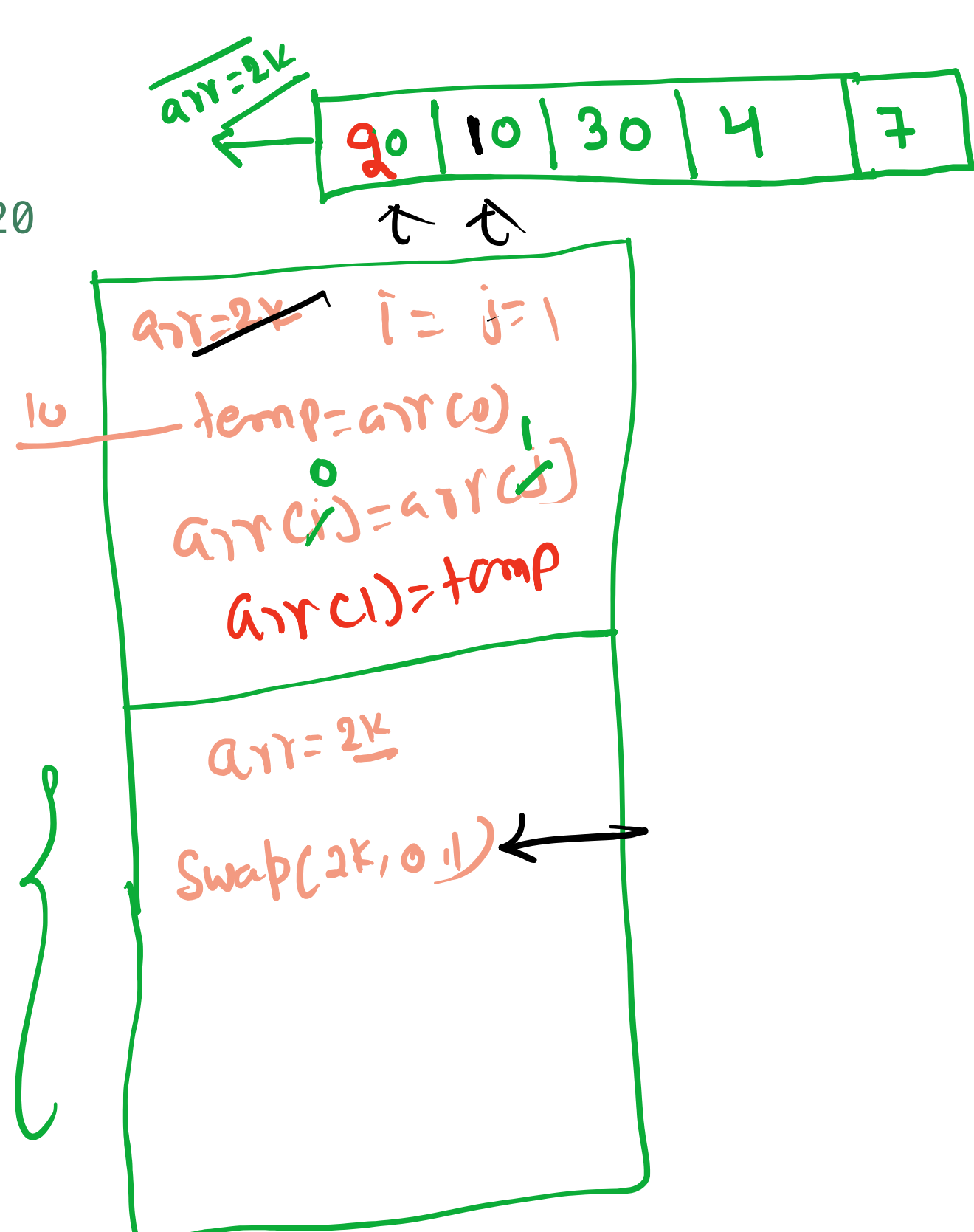
```
public static void main(String[] args) {
    // TODO Auto-generated method stub
    int[] arr = { 10, 20, 30, 4, 7 };
    // int[] ar = new int[] { 10, 20, 30, 4, 7 };
    System.out.println(arr[0] + " " + arr[1]); //10 20
    Swap(arr[0], arr[1]);
    System.out.println(arr[0] + " " + arr[1]);
}

public static void Swap(int a, int b) {
    int temp = a;
    a = b;
    b = temp;
}
```



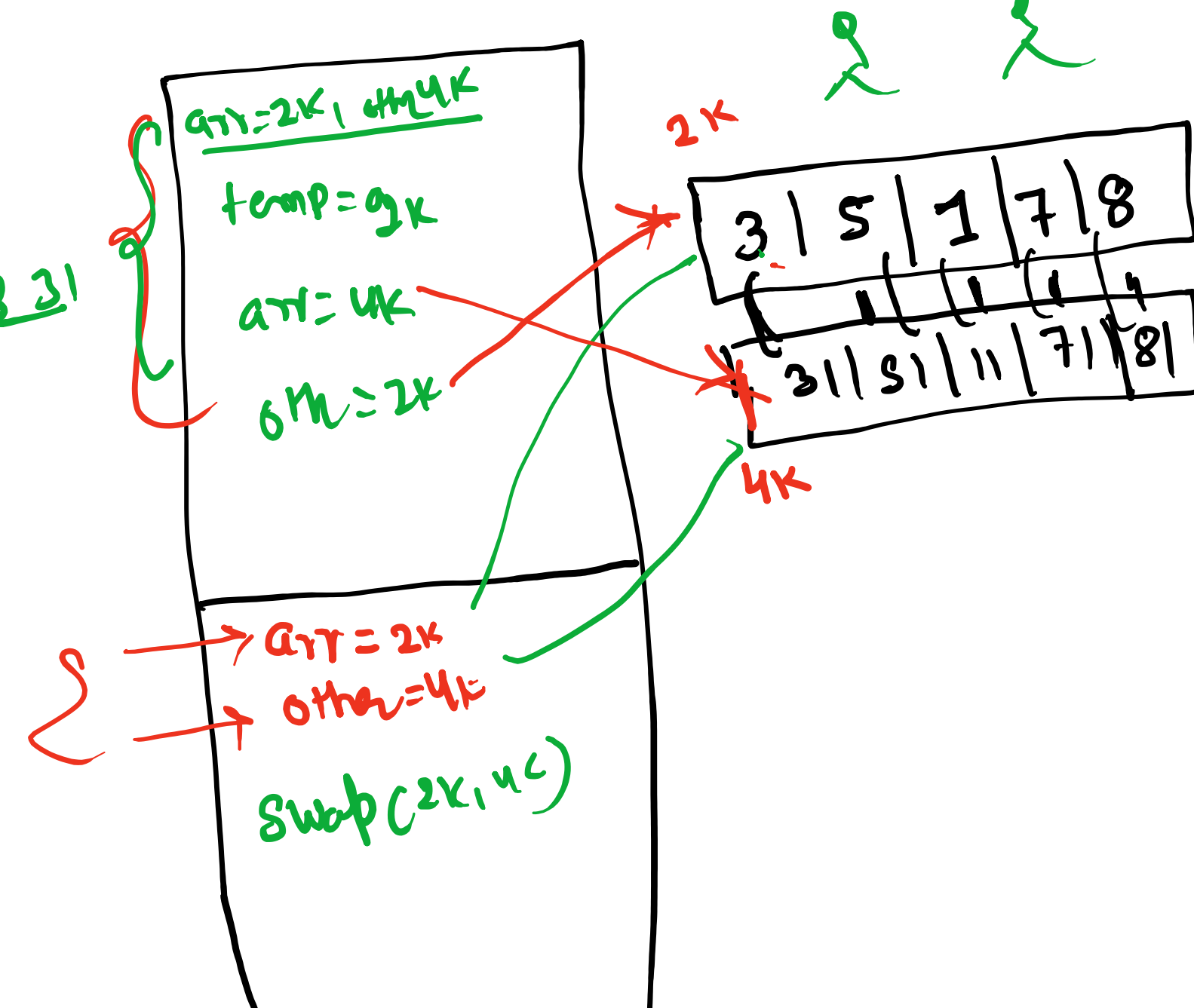
```
public static void main(String[] args) {
    // TODO Auto-generated method stub
    int[] arr = { 10, 20, 30, 4, 7 };
    System.out.println(arr[0] + " " + arr[1]); // 10 20
    Swap(arr, 0, 1);
    System.out.println(arr[0] + " " + arr[1]); //
}

public static void Swap(int[] arr, int i, int j) {
    int temp = arr[i];
    arr[i] = arr[j];
    arr[j] = temp;
}
```



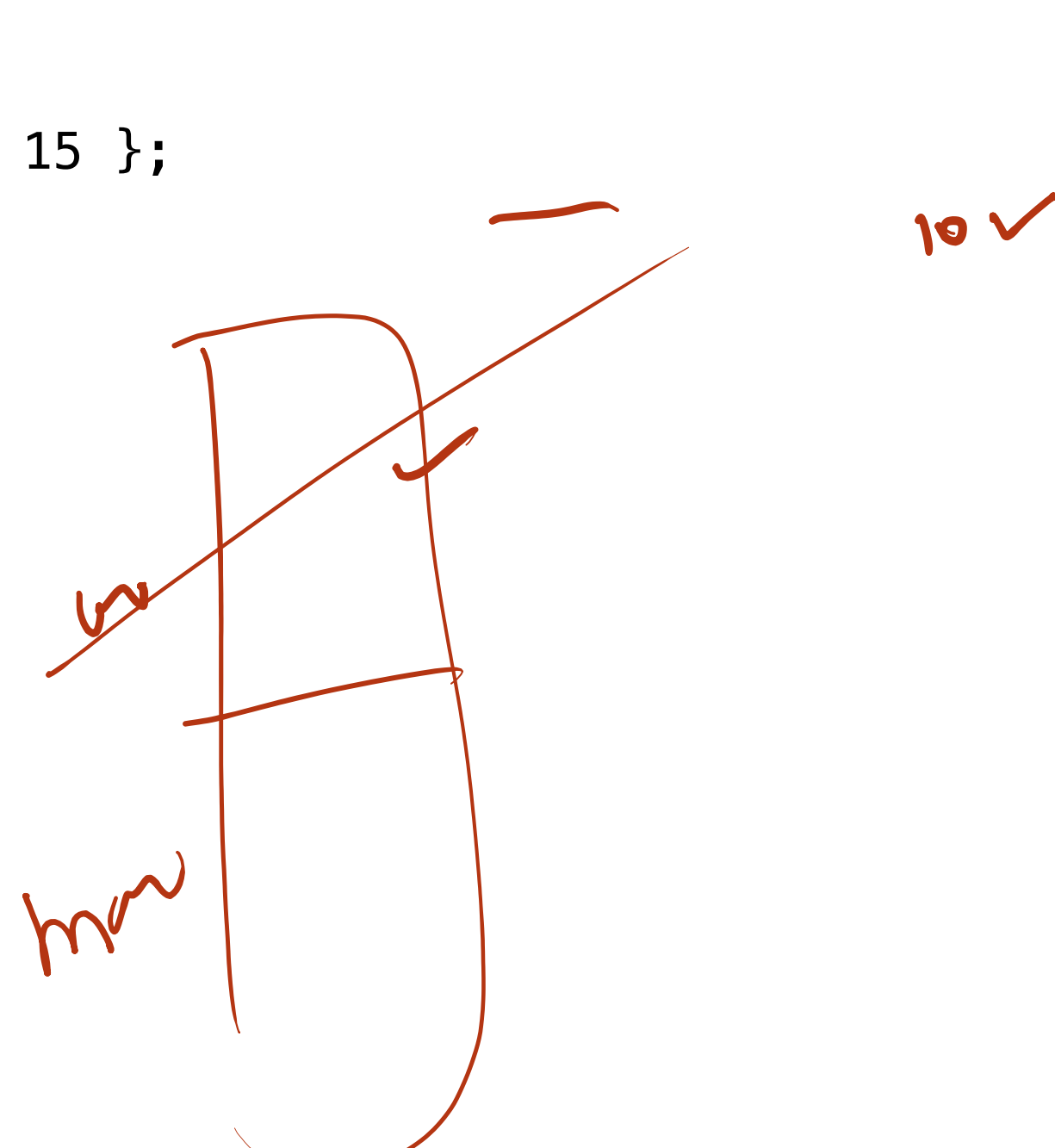
```
public static void main(String[] args) {
    // TODO Auto-generated method stub
    int[] arr = { 3, 5, 1, 7, 8 };
    int[] other = { 31, 51, 11, 71, 81 };
    System.out.println(arr[0] + " " + other[0]);
    swap(arr, other);
    System.out.println(arr[0] + " " + other[0]);
}

public static void swap(int[] arr, int[] other) {
    // TODO Auto-generated method stub
    int[] temp = arr;
    arr = other;
    other = temp;
}
```



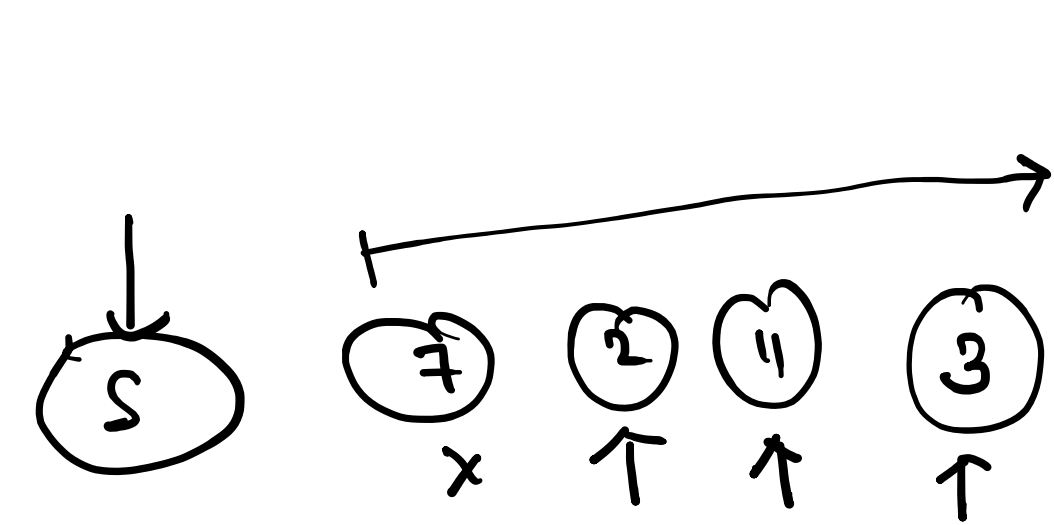
```
// TODO Auto-generated method stub
int[] arr = { 2, 3, 5, 1, 4, 11, 40, 51, 1, 15 };
int item = 4;
System.out.println(Search(arr, item));
}

public static int Search(int[] arr, int item) {
    for (int i = 0; i < arr.length; i++) {
        if (arr[i] == item) {
            return i;
        }
    }
    return -1;
}
```



```
public static void main(String[] args) {
    // TODO Auto-generated method stub
    int[] arr = { 2, 3, 5, 1, 4, 11, 49, 51, 1, 15 };
}

public static int max(int[] arr) {
}
```



$(S, 7, 2, 11, 3)$   
0 1 2 3 4

✓ 8 ✓ 11 ✓

$$i < j$$
