Lec-7

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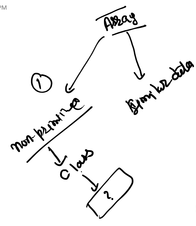
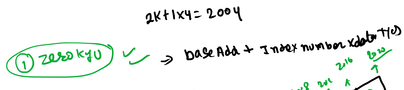




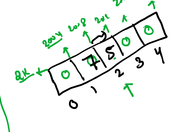

```
public static void main(String[] args) {
        // TODO Auto-generated method stub
        int[] arr = new int[5];
    }
```

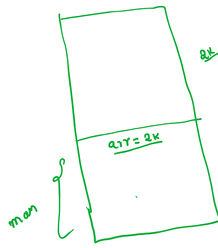
LHS RHS

2K + 2X4 = 2008

arr[0] = 5

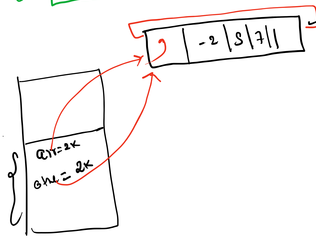
arr[1] = 7






```
package Lec7;

public class Arrays_Demo {

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

    }

}
```

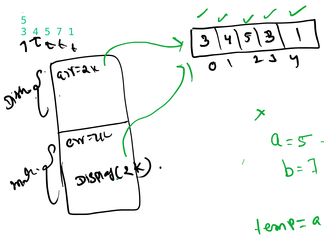
2K




```
public class User_Input {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        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] + " ");
        }
        System.out.println();
    }
}
```

5

3 4 5 7 1



a = 5 → 7

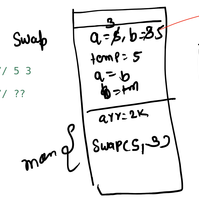
b = 7 → 5

temp = a

a = b → 7

a = temp → 5

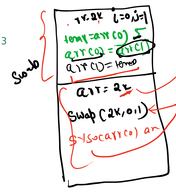
```
public static void main(String[] args) {
        // TODO Auto-generated method stub
        int[] arr = { 5, 3, 2, 1, 4 };
//      int[] brr = new int []{ 5, 3, 2, 1, 4 };
        System.out.println(arr[0] + " " + arr[1]);// 5 3
        Swap(arr[0], arr[1]);
        System.out.println(arr[0] + " " + arr[1]);// ??
    }

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



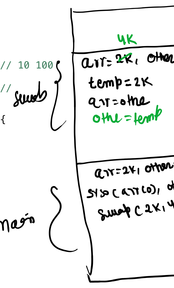
5 3

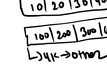
Pure ⇒

```
public static void main(String[] args) {
        // TODO Auto-generated method stub
        int[] arr = { 5, 3, 2, 1, 4 };
        System.out.println(arr[0] + " " + arr[1]);// 5 3
        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;
    }
```



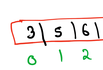

```
public static void main(String[] args) {
        // TODO Auto-generated method stub
        int[] arr = { 10, 20, 30, 40, 50 };
        int[] other = { 100, 200, 300, 400, 9 };
        System.out.println(arr[0] + " " + other[0]);// 10 100
        Swap(arr, other);
        System.out.println(arr[0] + " " + other[0]);//
    }

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





10 100

```
int[] arr = { 3, 5, 6, 2, 4, 16, 7, 8, 9 };
```



Array

```
public static int Maximum(int[] arr) {
        int max = arr[0];
        for (int i = 1; i < arr.length; i++) {

        }
    }
```

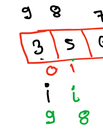
if(arr[i] > max)

max = arr[i]

```
public static void main(String[] args) {
        // TODO Auto-generated method stub
        int[] arr = { 3, 5, 6, 2, 4, 16, 7, 8, 9 };
        Reverse(arr);
        for (int i = 0; i < arr.length; i++) {
            System.out.print(arr[i] + " ");
        }
    }

    public static void Reverse(int[] arr) {

    }
```

i = 0

j = arr.len



i < j

while (arr[i] > j)

{ swap(i,j)

i++

j--

}