copy array from 1 array to another.

arraycopy() method ?

⊙ Create a copy of array ?

→ To create a copy of an array in java from one array to another we can do this with 2 methods

1) using arraycopy() method.

2) simply iterate over the original array.

1) Using System.arraycopy

" In Java, the arraycopy method is used to copy elements from one array to another. It is a static method defined in System class.

System.arraycopy(Object src, int srcPos, object dest, int destPos, int length);

(int [], int, int[], int, int);

In simple :-

arr[]  0
↑  ↑
System.arraycopy(original array, starting point of original array, new array created, new array starting, length of new array);
↓  ↓  ↓
new arr[]  0  newarr.length

Parameters ;

1) src : This is the source array from which elements are to be copied.

2) srcPos : This is the starting position into the source array (src) from where elements will be copied.

3) dest ; This is the destination array where elements will be copied.

4) destPos : This is the starting position in the destination array (dest) where elements will be copied.

5) Length; This specifies the number of elements to be copied from the source array to destination array.

Note

1) (src) & (dest) must be array of the same type.

2) srcPos & destPos must be positive non-negative & within bounds of their respective arrays.

3) length must be +ve non-negative & should not cause an (ArrayIndexOutOfBoundsException) when added to (srcPos) or (destPos).

This method is efficient for copying array elements, especially when dealing with Large arrays, as it ~~uti~~ ~~util~~ utilizes native code for performance optimization.

# Java code

```
// Create a array.
int[] srcArray = {1, 2, 3, 4, 5};

// Create a variable to store the size of
// the array.
int size = srcArray.length;

// Create array where we will copy the above
// numbers.
int[] destArray = new int[size];


// copy all elements from srcArray to destArray.
System.arraycopy(srcArray, 0, destArray, 0, srcArray.length);


// display o/p
for( int i : destArray){
        System.out.print( i + "");
}
```

output
↳ 1 2 3 4 5.

## Problem statement

Here's an array srcArray = {1, 2, 3, 4, 5} now create 2 Separate array's which will have values such as arr1 = {1, 2, 3} & arr2 = {4, 5}

→

```
                          0  1  2  3  4
     int[]   srcArray  = {1, 2, 3, 4, 5};
  //
                        0 1 2
  // int[]   arr1     = {1, 2, 3}    ⎫
  //                    0   1        ⎬ comments
  // int []  arr2     = {4, 5}       ⎭

   int   size arr1    =   3;
   int   sizearr2     =   2;

   int[]   arr1   =   new   int [sizearr1];
   int[]   arr2   =   new   int [size arr2];

System.arraycopy(srcArray, 0, arr1, 0, srcArray.length-2);
System.arraycopy(srcArray, 3, arr2, 0, srcArray.length-3);

for(int  i :  arr1){
     System.out.print(i + " ");
}

for(int  i:  arr2){
     System.out.print(i + " ");
}
```