

Kadir Has University
Department of Computer Engineering
CE 242 - Data Structures and Algorithms
Spring 2010 – Ahmet Ardal
Lab Assignment 3

1. Write a function that prints an array's elements in reverse order. The function should start printing elements from the [startIdx]th element, and the algorithm should be recursive.

Function signature:

```
public static void printArrayReverse(int[] arr, int startIdx)
```

2. Write a function that searches a specific key in an array using the binary search algorithm. The function should return the index number if the key is found, otherwise a value of -1 should be returned. Again the algorithm should be recursive.

Function signature:

```
public static int binarySearch(  
    int[] arr,  
    int key,  
    int leftIdx,  
    int rightIdx)
```

Note: While implementing the functions above, write your code into the function body of the corresponding function definition in the Java source file named "CE242_HW3.java", which is provided on the Blackboard. Also a main() function with some test code is available within that file for you to test the functions.