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053

Test 3

```
Accept 10 number in an array. Display all even number at the beginning and
all Odd at the end. Use only one loop

Scanner in = new Scanner(System.in);
int arr[] = new int[10];
System.out.println("enter 10 nums");
for (int i = 0; i < arr.length; i++) {
arr[i] = in.nextInt();
}
int a[] = new int[arr.length];
int m = 0;
for (int j = 0; j < arr.length-1; j++) {
if(arr[j]%2 == 0) {
a[m] = arr[j];
m++;
}
else {
a[arr.length-1-j] = arr[j];
}
}
for (int i = 0; i < arr.length; i++) {
System.out.print(a[i] + " ");
}
}
```

```
// Q.2) Accept 5 number in an array and sort it. Accept a number from user
and check if it is there in an array or not use binary search.


public static void main(String[] args) {
Scanner in = new Scanner(System.in);
int arr[] = new int[5];
System.out.println("enter 5 nums");
for (int i = 0; i < arr.length; i++) {
arr[i] = in.nextInt();
}
System.out.println("enter num to search");
int n = in.nextInt();
Arrays.sort(arr);
System.out.println(binary(arr,n));
}
public static boolean binary(int arr[], int n) {
int start = 0;
int end = arr.length -1;
int mid;
```

```
while(start<= end) {
mid = end + (start - end)/2;
if(arr[mid] == n) {
return true;
}
else if (arr[mid] > n) {
start = mid+1;
}
else {
end = mid-1;
}
}
return false;
}
}
```