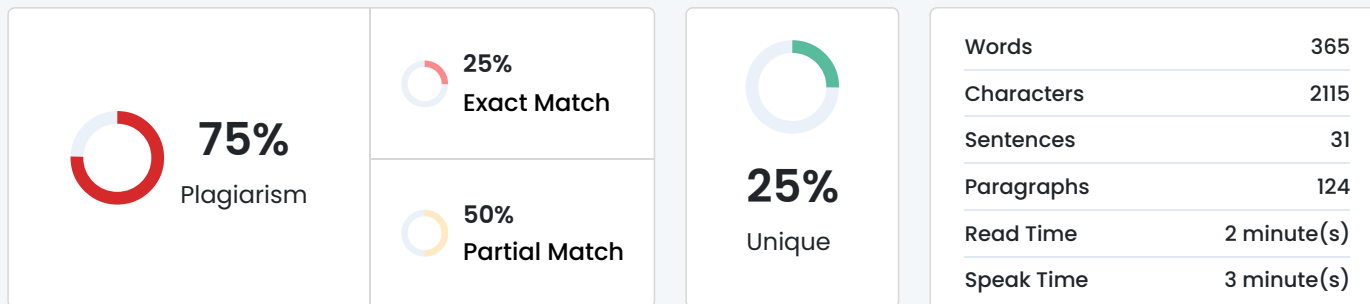


Plagiarism Scan Report



Content Checked For Plagiarism

Design & Analysis of Algorithm (Lab)

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B-33

Submitted to: Mr.Aryan Gupta

```
import java.util.*;
```

```
public class merge_sort {
```

```
public static void merge(int arr[],int left,int mid,int right){
```

```
int n1= (mid-left)+1;
```

```
int n2=(right-mid);
```

```
int L[]=new int[n1];
```

```
int R[]=new int[n2];
```

```
for(int i = 0;i<n1;i++)
```

```
L[i]=arr[left+i];
```

```
for(int j = 0;j<n2;j++)
```

```
R[j]=arr[mid+1+j];
```

```
int i=0;
```

```
int j=0;
```

```
int k = left;
```

```
while(i<n1 && j<n2){
```

```
if(L[i]<R[j]){
```

```
arr[k]=L[i];
```

```
i++; }
```

```
else{
```

```
arr[k]=R[j];
```

```
j++; }
```

```
k++; }
```

```
while(i<n1){
```

```
arr[k]=L[i];
```

```
i++;
```

```
k++;
```

```
}
```

```
while(j<n2){
```

```
arr[k]=R[j];
```

```
Merge Sort.....
```

```
j++;
```

```
k++;
```

```

}
}
public static void mergeSort(int []arr,int left,int right){
if(left<right){
int mid= left+(right-left)/2;
mergeSort(arr,left,mid);
mergeSort(arr,mid+1,right);
merge(arr,left,mid,right);
}
}
public static void main(String arg[]){
Scanner sc=new Scanner(System.in);
<mark id="p_0">System.out.println("Enter size of array you want to input: ");
int n= sc.nextInt();
int arr[]=new int[n];
System.out.println("Enter elements : ");
for (int i = 0; i < n; i++) {</mark>
arr[i] = sc.nextInt(); }
System.out.println("Original" + Arrays.toString(arr));
mergeSort(arr,0,n-1);
System.out.println("Updated" + Arrays.toString(arr));
}}

```

Test Case

- 1.
- 2.
- 3.
- 4.
- 5
- 6
- 7
- 8
- 9
- 10

User Input

Size: 6

Elements: 12 11 13 5 6 7

Size: 7

Elements: 38 27 43 3 9 82 10

Size: 5

Elements: 1 2 3 4 5

Size: 5

Elements: 5 4 3 2 1

Size: 5

Elements: 10 20 10 30 20

Size: 4

Elements: 7 7 7 7

Size: 8

Elements: 9 -3 5 2 6 8 -6 1

Size: 4

Elements: 100 90 80 70

Size: 1

Elements: 1

Size: 0

Elements: -

Expected Output

Original: [12, 11, 13, 5, 6, 7]

Sorted: [5, 6, 7, 11, 12, 13]

Original: [38, 27, 43, 3, 9, 82, 10]

Sorted: [3, 9, 10, 27, 38, 43, 82]

Original: [1, 2, 3, 4, 5]

Sorted: [1, 2, 3, 4, 5]

Original: [5, 4, 3, 2, 1]

Sorted: [1, 2, 3, 4, 5]

Original: [10, 20, 10, 30, 20]

Sorted: [10, 10, 20, 20, 30]

Original: [7, 7, 7, 7]

Sorted: [7, 7, 7, 7]

Original: [9, -3, 5, 2, 6, 8, -6, 1]

Sorted: [-6, -3, 1, 2, 5, 6, 8, 9]

Original: [100, 90, 80, 70]

Sorted: [70, 80, 90, 100]

Original: [1]

Sorted: [1]

Original: []

Sorted: []

SCREENSHOTS:

TEST CASES

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Matched Source

Similarity 50%

Title:How to count certain elements in array? - javascript - Stack Overflow

May 25, 2011 ♦ var arrayCount = [1,2,3,2,5,6,2,8]; var co = 0; function findElement ... var arr = [1, 2, 3, 5, 2, 8, 9, 2];
// Count how many 2 there♦...

<https://stackoverflow.com/questions/6120931/how-to-count-certain-elements-in-array>

Similarity 25%

Title:Solved Linked List is a part of the Collection framework - Chegg

Write a program to generate a sorted singly linked list, write a method which takes an element and returns the list with that element inserted such that the list is still sorted. <1,2,5,6,8,9 >+7+<1, 2,5,6,7,8,9> 2.

<https://www.chegg.com/homework-help/questions-and-answers/linked-list-part-collection-framework-present-javautil-package-linkedlist-data-structure-l-q57203203>

