

```

1  import java.util.Arrays;
2  import java.util.Collections;
3  import java.util.Scanner;
4  public class ArrangeArray
5  {
6      static void twoWaySort(Integer arr[], int n)
7      {
8          int l = 0, r = n - 1;
9          int k = 0;
10         while (l < r)
11         {
12             while (arr[l] % 2 != 0)
13             {
14                 l++;
15                 k++;
16             }
17             while (arr[r] % 2 == 0 && l < r)
18                 r--;
19             if (l < r)
20             {
21                 int temp = arr[l];
22                 arr[l] = arr[r];
23                 arr[r] = temp;
24             }
25         }
26         Arrays.sort(arr, 0, k, Collections.reverseOrder());
27         Arrays.sort(arr, k, n);
28     }
29     public static void main(String[] args)
30     {
31         Scanner s = new Scanner(System.in);
32         System.out.println("Enter the length of the array:");
33         Integer length = s.nextInt();
34         Integer [] arr = new Integer[length];
35         System.out.println("Enter the elements of the array");
36         for(int i=0; i<length; i++ )
37         {
38             arr[i] = s.nextInt();
39         }
40         System.out.println("Ascending Order: ");
41         twoWaySort(arr, arr.length);
42         System.out.println(Arrays.toString(arr));
43     }
44 }

```



Enter the length of the array:

8

Enter the elements of the array:

1 3 4 62 32 15 66 87

Ascending Order:

[87, 15, 3, 1, 4, 32, 62, 66]

Process finished.

R.Hemanthkumar

SAP Id-51834684

```
1 import java.util.Scanner;
2 public class Merge
3 {
4     static Scanner s = new Scanner(System.in);
5     public static void main(String[] args)
6     {
7         Scanner s = new Scanner(System.in);
8         System.out.println("Enter the size of the first array");
9         int [] arr1 = insert();
10        System.out.println("Enter the size of the second array");
11        int [] arr2 = insert();
12        int [] arr3 = new int [arr1.length+arr2.length];
13        for(int i=0;i<(arr1.length+arr2.length);i++)
14        {
15            if(i<arr1.length)
16            {
17                arr3[i]=arr1[i];
18            }
19            else
20            {
21                arr3[i]=arr2[i-arr1.length];
22            }
23        }
24        bubblesort(arr3);
25        for(int i=0;i<arr3.length;i++)
26        {
27            System.out.print(arr3[i]+" ");
28        }
29    }
30    public static int[] insert()
31    {
32        int [] arr = new int[s.nextInt()];
33        System.out.println("Enter the values :");
34        for(int i=0;i<arr.length;i++)
35        {
36            arr[i] = s.nextInt();
37        }
38        return arr;
39    }
40    public static int[] bubblesort(int arr [])
41    {
42        System.out.println("Output: ");
43        for(int i=0;i<arr.length-1;i++)
44        {
45            for(int j=0;j<arr.length-i-1;j++)
46            {
47                if(arr[j]>arr[j+1])
48                {
49                    int temp = arr[j];
50                    arr[j] = arr[j+1];
51                    arr[j+1] = temp;
52                }
53            }
54        }
55        return arr;
56    }
57 }
```



```
Enter the size of the first array:
5
Enter the values :
1 56 89 3 25
Enter the size of the second array:
5
Enter the values :
2 78 36 95 12
Output:
1 2 3 12 25 36 56 78 89 95
Process finished.
R.Hemanthkumar
SAP I'd-51834684
```



```
1  abstract class Student
2  {
3      abstract void reading();
4      abstract void listening();
5      abstract void writing();
6      abstract void walking();
7      abstract void drawing();
8  }
9  class HemanthKumar_R extends Student
10 {
11     void reading()
12     {
13         System.out.println("Student is reading...");
14     }
15     void listening()
16     {
17         System.out.println("Student is listening...");
18     }
19     void writing()
20     {
21         System.out.println("Student is writing...");
22     }
23     void walking()
24     {
25         System.out.println("Student is walking...");
26     }
27     void drawing()
28     {
29         System.out.println("Student is drawing...");
30     }
31 }
32 class HemanthKumar
33 {
34     public static void main(String args[])
35     {
36         System.out.println("Name :");
37         Student s=new HemanthKumar_R();
38         s.reading();
39         s.listening();
40         s.writing();
41         s.walking();
42         s.drawing();
43     }
44 }
45
```



Terminal



```
Name :  
Student is reading...  
Student is listening...  
Student is writing...  
Student is walking...  
Student is drawing...
```

```
Process finished.  
R.Hemanthkumar.  
SAP ID-51834684
```

```

1  import java.lang.Math;
2  public class Pattern
3  {
4      public static void main(String[] args)
5      {
6          char ch=' ';
7          System.out.println("Output: ");
8          for(int i=4;i>=1;i--)
9          {
10             int k=(int)Math.pow(2,i-1);
11             if(i==4)
12                 ch='*';
13             else if(i==3)
14                 ch='&';
15             else if(i==2)
16                 ch='%';
17             for(int j=i;j<=4;j++)
18             {
19                 System.out.print(" ");
20             }
21             for(int j=1;j<=k+2;j++)
22             {
23                 if(j==1 || j==k+2 && i!=1)
24                 {
25                     System.out.print("#");
26                 }
27                 else if(i!=1)
28                 {
29                     System.out.print(ch);
30                 }
31             }
32             System.out.println();
33         }
34     }
35 }
36 }

```



Terminal



Output:

#*****#

#&&&&#

#%%#

#

Process finished.

R.Hemanthkumar

SAP I'd-51834684



Terminal



```
Enter the string  
hello how are u doing hope all well  
Output: 8 words.  
Process finished.  
R.Hemanthkumar  
SAP I'd -51834684
```