1. :

```
public class qn1 {
    public static void main (String[]args)
    {
double n1 = 5, n2 = 15, n3 = 50; if (n1
>= n2 && n1 >= n3)
    System.out.println (n1 + "is the largest number."); else if (n2
>= n1 && n2 >= n3)
    System.out.println (n2 + "is the largest number."); else
            System.out.println (n3 + "is the largest number.");
    }
}
```

Output:

```
20.0 is the largest number.
```

2:

```
public class qn2 {
public static void main(String[] args) { Scanner
in = new Scanner(System.in); int cnte =0
,cnto = 0;
        for(int i=0;i<10;i++){
            System.out.println("Enter no. :" );
            int x = in.nextInt();
          if(x%2==0){
              cnte++;
            }else cnto++;
        }
System.out.println("No of even no is " + cnte);
System.out.println("No of odd no is " + cnto);
    }
}
```

Output:

```
Enter no. :
1
Enter no. :
3
Enter no. :
4
Enter no. :
5
Enter no. :
6
Enter no. :
7
Enter no. :
8
Enter no. :
9
Enter no. :
10
Enter no. :
11
No of even no is 4
No of odd no is 6
```

3:

```
public class qn3 {
    public static void main(String[] args) {
```

```
            //Initialize array
    int[] arr = new int[]{5, 4, 3, 2, 1}; int temp =
    0; System.out.println("Original array: "); for
    (int i = 0; i < arr.length; i++) {
                    System.out.print(arr[i] + " ");
                }
                for (int i = 0; i < arr.length; i++) {
                    for (int j = i + 1; j < arr.length; j++) { if
                        (arr[i] > arr[j]) {
                            temp = arr[i];
                            arr[i] = arr[j];
                            arr[j] = temp;
                        }
                    }
                }
                System.out.println();
                //Displaying elements of array after sorting
                System.out.println("Elements of array sorted :
                "); for (int i = 0; i < arr.length; i++) {
                    System.out.print(arr[i] + " ");
                }
            }
     }
```

Output:

Original array:
5 4 3 2 1
Elements of array sorted :
1 2 3 4 5

4:

```
    public class qn4 {
        static int count=0;
        public static void main(String args[])
        {
    qn4 c1=new qn4();
    c1.count();
    qn4 c2=new qn4();
    c2.count();
    qn4 c3=new qn4();
    c3.count();
                System.out.println("Total Number of Objects: "+count);
        }
        //function counts the number of objects
        static void count()
        {
            count++;
        }
     }
```

Output:

Total Number of Objects: 3

5:

```
    public class qn5 {
        //Find diagnal sum of a matrix
public static void main(String[] args) { int[][] arr =
    {{1,2,3},{4,5,6},{7,8,9}};
                int sum = 0;

                for(int i = 0; i < arr.length; i++)
```

```
            {
                sum += arr[i][i];
            }
            System.out.println("Left diagnol sum is:"+sum);

            sum = 0;
            for(int i = 0; i < arr.length; i++)
            {
                sum += arr[i][arr.length-1-i];
            }
            System.out.println("Right diagnol sum is:"+sum);
        }


    }
```

Output:

```
Left diagnol sum is:15
Right diagnol sum is:15
```

6:

```
public class qn6 {
    public static void main(String[] args) {
        int[] arr = {1,2,3,4,5,6,7,8,2,3,1,1,3,4,6,5};
        int x= arr.length;
int[] count = new int[100]; int temp;
        for(int i = 0; i < arr.length; i++)
        {
            temp = arr[i];
            count[temp]++;
        }

        //Display the array
        for(int i = 0; i < count.length; i++)
        {
            if(count[i] != 0)
            {
                System.out.println(i+" occurs "+count[i]+" times");
            }
        }


    }

}
```

Output:

```
1 occurs 3 times
2 occurs 2 times
3 occurs 3 times
4 occurs 2 times
5 occurs 2 times
6 occurs 2 times
7 occurs 1 times
8 occurs 1 times
```