```java
/*
 * Problem Statement 1:
You are given a positive integer n. Write a Java function that counts the number of digits in
the number. However, you are not allowed to convert the number to a string, use any
mathematical formula or log function, or use any inbuilt functions. The function should take
the integer n as input and return the number of digits in the number.
Example output:
Input: 12345
Output: Number of digits: 5
 */

public class Main {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int n=1234;
        int count=0;
        while(n>0) {
            n=n/10;
            count+=1;
        }
        System.out.println("Number of digits are:"+count);

    }


}

/*
 * Output:
 * Number of digits are:4
 */
```

```java
/*
Problem Statement 2:
You are given a positive integer n. Write a Java function that counts the number of even and
odd digits in the number. However, you are not allowed to convert the number to a string,
use any mathematical formula or log function, or use any inbuilt functions. The function
should take the integer n as input and return the number of even and odd digits in the number.
Example output:
Input: 24689
Output: Number of even digits: 4, Number of odd digits: 1
 */

public class Main {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int n=123466;
        int evenCount=0;
        int oddCount=0;
        while(n>0) {
            if(((n%10)%2==0))
                evenCount+=1;
            else
                oddCount+=1;
            n=n/10;
        }
        System.out.println("Number of even digits :"+evenCount+", Number of odd digits: "+oddCount);
    }


}

/*
 * Output:
 * Number of even digits :4, Number of odd digits: 2
 */
```

```java
/*
Problem Statement 3:
You are given a positive integer n. Write a Java function that counts the sum of digits in the
number. However, you are not allowed to convert the number to a string, use any
mathematical formula or log function, or use any inbuilt functions. The function should take
the integer n as input and return the sum of digits in the number.
Example output:
Input: 4567
Output: Sum of digits: 22
 */

public class Main {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int n=123466;
        System.out.println("Input: "+n);
        int sum=0;
        while(n>0) {
            sum+=n%10;
            n=n/10;
        }
        System.out.println("Output: Sum of digits "+sum);
    }


}

/*
 * Output:
 * Input: 123466
   Output: Sum of digits 22
 */
```

```java
/*
Problem Statement 4:
You are given a string s containing alphanumeric characters and special characters. Write a
Java function that removes all the special characters from the string. The function should take
the string as input and return the modified string.
Example Input: "He#llo $Wo%rld!"
Example Output: "HelloWorld"
 */

public class Main {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        String str="He#llo $Wo%rld!";
        System.out.println("Input: "+str);
        str=str.replaceAll("[^a-zA-Z0-9]","");
        System.out.println("Output: "+str);
    }

}

/*
 * Output:
 * Input: He#llo $Wo%rld!
   Output: HelloWorld
 */
```

```java
/*
Problem Statement 5:
You are given a string s containing spaces between words. Write a Java function that removes
all the spaces from the string. The function should take the string as input and return the
modified string
Example Input: "The quick brown fox"
Example Output: "Thequickbrownfox"
 */

public class Main {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        String str="The quick brown fox";
        System.out.println("Input: "+str);
        str=str.replaceAll("[ ]","");
        System.out.println("Output: "+str);
    }

}

/*
 * Output:
 * Input: The quick brown fox
Output: Thequickbrownfox
 */
```