

IIP
Test Unit 2 - Possible solution
Year 2015-2016

Name:

1. Write a Java assignment that converts an amount in kilometers into miles (1 mile is equal to 1609 meters). You can suppose that the value of kilometers is stored in a positive **double** variable **km**, and that the result will be stored in a positive **double** variable **miles**.

```
miles = km/1.609;
```

2. Write a Java program class that asks for your an integer number and writes **true** if it an even number (multiple of 2) or a negative number, and **false** otherwise.

```
import java.util.*;

public class EvenOrNegative {
    public static void main(String [] args) {
        int n;
        Scanner kbd = new Scanner(System.in).useLocale(Locale.US);

        System.out.print("Write an integer number: ");
        n=kbd.nextInt();
        System.out.println(n<0 || n%2==0);
    }
}
```

3. Write a Java program that asks for a line and writes on the screen the first word of the line (those characters before the first blank space). You can suppose that the string has at least two words.

```
import java.util.*;

public class FirstWord {
    public static void main(String [] args) {
        String s;
        int l;
        Scanner kbd = new Scanner(System.in).useLocale(Locale.US);

        System.out.print("Write the line: ");
        s=kbd.nextLine();

        l=s.indexOf(" ");
        System.out.println(s.substring(0,l));
    }
}
```

4. Write a Java program that asks for the radius of a circle (positive real number) and prints out the area of the circle ($2\pi r$). In case that radius is negative, its absolute value must be used.

```
import java.util.*;

public class CircleArea {
    public static void main(String [] args) {
        double r, a;
        Scanner kbd = new Scanner(System.in).useLocale(Locale.US);

        System.out.print("Write the radius: ");
```

```
    r=kbd.nextDouble();

    r=Math.abs(r);
    a=Math.PI*r*r;
    System.out.println("Area: "+a);
}
}
```