

# Java i/o – reading inputs in Java

## Assignment Solutions



**Q1 – Input name, roll number and field of interest from user and print in the format below :**

**Name: xyz, Roll number: xyz, Field of interest: xyz**

**Input :** Single line format

Aman Gupta 4053 Physics

**Output :**

Name: Aman Gupta

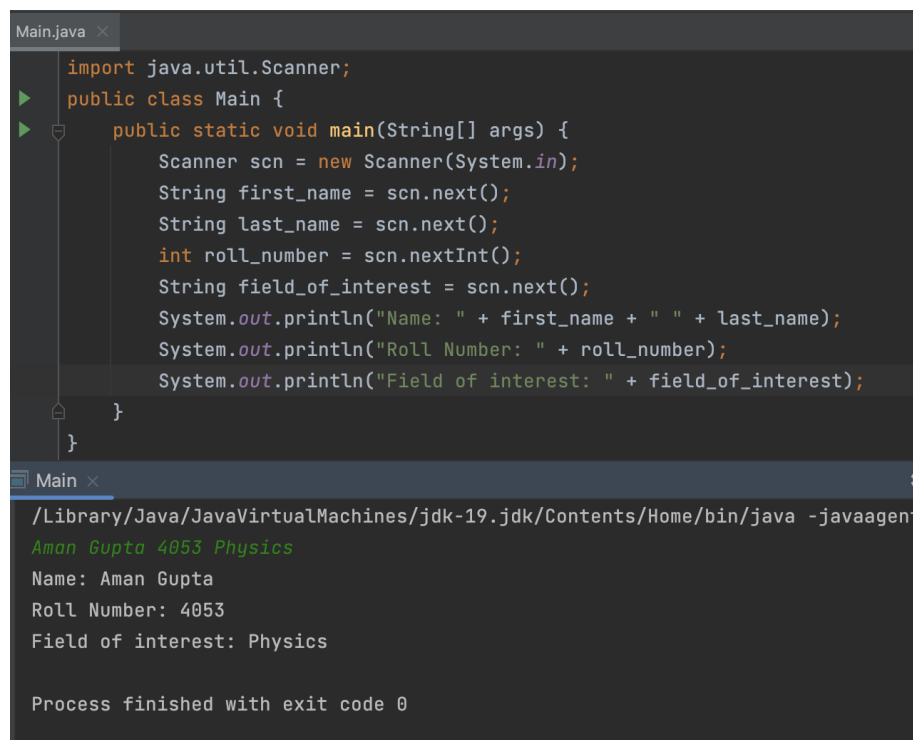
Roll Number: 4053

Field of interest: Physics

**Code:**

```
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        String first_name = scn.next();
        String last_name = scn.next();
        int roll_number = scn.nextInt();
        String field_of_interest = scn.next();
        System.out.println("Name: " + first_name + " " + last_name);
        System.out.println("Roll Number: " + roll_number);
        System.out.println("Field of interest: " + field_of_interest);
    }
}
```



The screenshot shows a Java IDE with a file named 'Main.java'. The code is the same as the one provided in the previous block. Below the code editor, there is a terminal window showing the command to run the program: `/Library/Java/JavaVirtualMachines/jdk-19.jdk/Contents/Home/bin/java -javaagent Aman Gupta 4053 Physics`. The output of the program is displayed in the terminal: `Name: Aman Gupta`, `Roll Number: 4053`, and `Field of interest: Physics`. The terminal also shows `Process finished with exit code 0`.

```
Main.java x
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        String first_name = scn.next();
        String last_name = scn.next();
        int roll_number = scn.nextInt();
        String field_of_interest = scn.next();
        System.out.println("Name: " + first_name + " " + last_name);
        System.out.println("Roll Number: " + roll_number);
        System.out.println("Field of interest: " + field_of_interest);
    }
}

Main x
/Library/Java/JavaVirtualMachines/jdk-19.jdk/Contents/Home/bin/java -javaagent
Aman Gupta 4053 Physics
Name: Aman Gupta
Roll Number: 4053
Field of interest: Physics

Process finished with exit code 0
```

**Q2 - Input two different string and print them in same line.**

Input :

Level

Up

Output :

LevelUp

Code:

```
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        String first = scn.nextLine();
        String last = scn.nextLine();
        System.out.println(first + last);
    }
}
```

```
Main.java x
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        String first = scn.nextLine();
        String last = scn.nextLine();
        System.out.println(first + last);
    }
}
```

```
Main x
/Library/Java/JavaVirtualMachines/jdk-19.jdk/Contents/Home
Level
Up
LevelUp

Process finished with exit code 0
```

**Q3 -** If the marks of Robert in three subjects are entered through keyboard (each out of 100), write a program to calculate his total marks and percentage marks.

Input :

78  
89  
95

Output : Total marks: 262  
percentage marks: 87%

Code:

```
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int mark1 = scn.nextInt();
        int mark2 = scn.nextInt();
        int mark3 = scn.nextInt();
        int total_marks = mark1 + mark2 + mark3;
        int percentage = (total_marks / 3);
        System.out.println(total_marks);
        System.out.println(percentage + "%");
    }
}
```

```
Main.java x
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int mark1 = scn.nextInt();
        int mark2 = scn.nextInt();
        int mark3 = scn.nextInt();
        int total_marks = mark1 + mark2 + mark3;
        int percentage = (total_marks / 3);
        System.out.println(total_marks);
        System.out.println(percentage + "%");
    }
}

Main x
/Library/Java/JavaVirtualMachines/jdk-19.jdk/Contents/Home
78
89
95
262
87%

Process finished with exit code 0
```

**Q4 - Given two numbers, return their sum in the following format:**

**Int t representing number of test cases**

**T lines of Two integers representing the numbers to be added**

**Input :**

3  
4 5  
18 20  
49 27

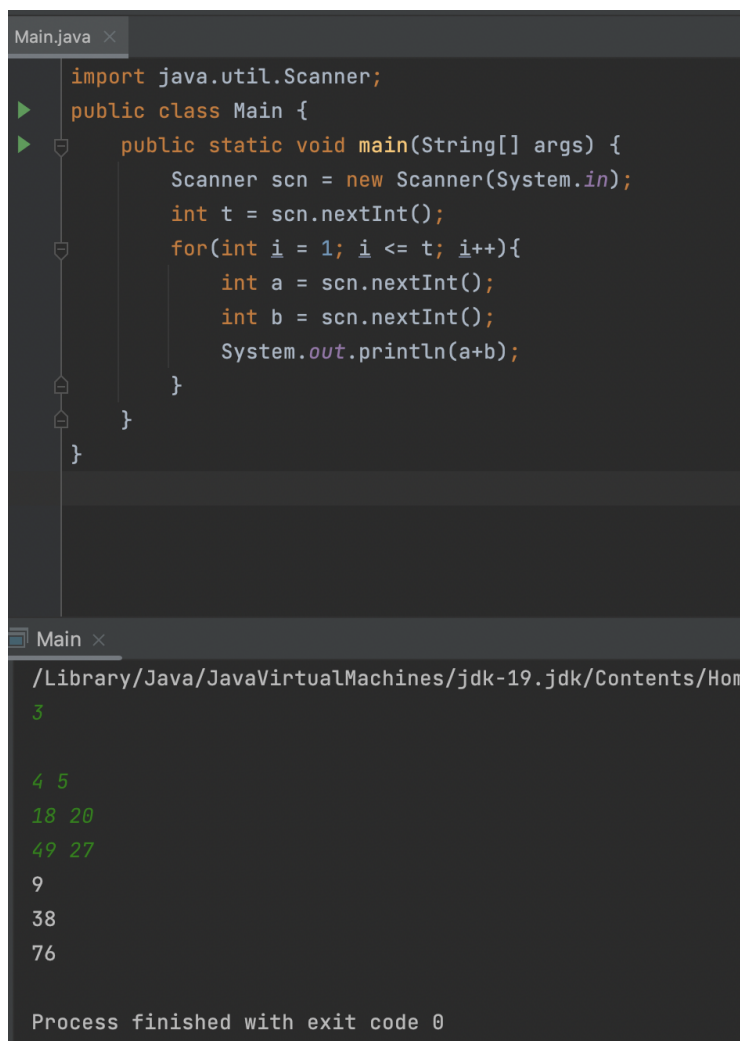
**Output :**

9  
38  
76

## Code:

```
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int t = scn.nextInt();
        for(int i = 1; i <= t; i++){
            int a = scn.nextInt();
            int b = scn.nextInt();
            System.out.println(a+b);
        }
    }
}
```



The screenshot shows an IDE window titled 'Main.java' containing the same Java code as above. Below the code editor is a terminal window titled 'Main' showing the execution path and output. The output consists of three lines of numbers: '3', '4 5', and '18 20', followed by a final line '49 27'. The process finished with exit code 0.

```
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int t = scn.nextInt();
        for(int i = 1; i <= t; i++){
            int a = scn.nextInt();
            int b = scn.nextInt();
            System.out.println(a+b);
        }
    }
}
```

```
/Library/Java/JavaVirtualMachines/jdk-19.jdk/Contents/Home
3
4 5
18 20
49 27
9
38
76
Process finished with exit code 0
```

**Q5 – Given few lines of input(number of lines unknown) where each line has two strings, concatenate the strings.**

**Input :**

Hello World  
Happy Faces  
Sunny Day  
Good Morning

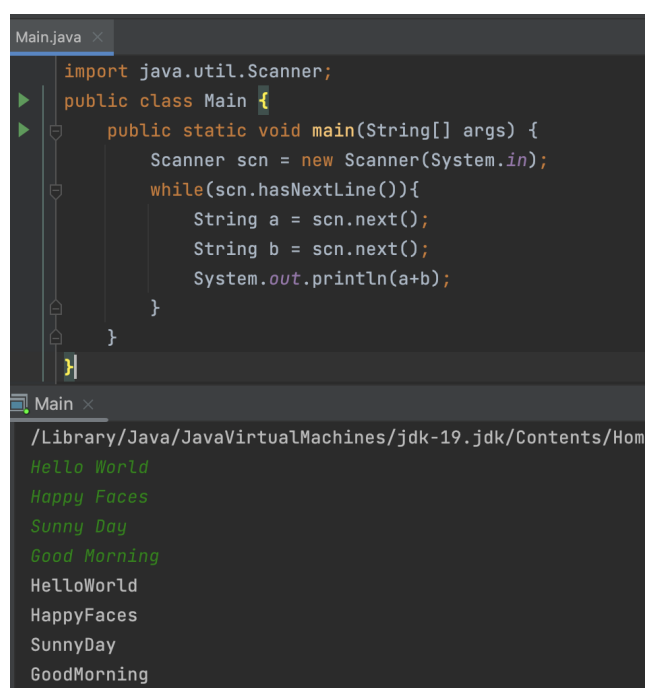
**Output :**

HelloWorld  
HappyFaces  
SunnyDay  
GoodMorning

**Code:**

```
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        while(scn.hasNextLine()){
            String a = scn.next();
            String b = scn.next();
            System.out.println(a+b);
        }
    }
}
```



The screenshot shows an IDE with two windows. The top window, titled 'Main.java', contains the Java code for concatenating strings. The bottom window, titled 'Main', shows the output of the program. The output consists of four lines of concatenated strings: 'HelloWorld', 'HappyFaces', 'SunnyDay', and 'GoodMorning'.