IRC_JAVA_COD_BASICS

Test Summary

- No. of Sections: 1
- No. of Questions: 15
- Total Duration: 180 min

Section 1 - CODING

Section Summary

- No. of Questions: 15
- Duration: 180 min

Additional Instructions:

None

Q1. **Problem statement:**

Write a program to display a string in following format.

eg:
Input
Hi
Welcome
Output
Hi and Welcome

Input Format

The first line of the input consists of the string S1.
The second line of the input consists of the string S2.

Output Format

The output prints the string as given in the example.

Constraints

Strings only.

Sample Input

```
U
ME
```

Sample Output

```
U and ME
```

Sample Input

```
LOVE
LIVE
```

Sample Output

```
LOVE and LIVE
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q2. **Problem Statement:**

Write a Java program to get the integer values and print the same integer values.

Input Format

Input consists of a integer value

Output Format

Output consists of a integer value

Sample Input

```
26
```

Sample Output

```
26
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q3. **Problem Statement:**

Write a java program to print the floating point value.

Input Format

Input consists of one integer

Output Format

Output consists of floating point values with precisions

Sample Input

```
5.374675
```

Sample Output

```
5.375
5.37
5.4
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q4. **Problem Statement:**

Write a Java program to print the character value.

Input Format

Input consists of a character value

Output Format

Output consists of a character value

Sample Input

```
d
```

Sample Output

```
d
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q5. **Problem Statement:**

Write a java program to convert the integer data type to float data type.

Input Format

Input consists of integer value

Output Format

output consists of float value

Sample Input

```
5
```

Sample Output

```
5.0
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q6. **Problem Statement:**

Write a Java program to find the conversion of integer value to character value

Input Format

Input consists of integer value

Output Format

output consists of character value

Sample Input

```
101
```

Sample Output

```
e
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q7. **Problem Statement:**

Write a program to find the conversion of character to integer value.

Input Format

Input consists of a character

Output Format

output consists of a integer value

Sample Input

```
s
```

Sample Output

```
115
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q8. **Customized Welcome Message**

Nikhil, the founder of “Pine Tree” company wished to design an Event Management System that would let its Customers plan and host events seamlessly via an online platform.

As a part of this requirement, Nikhil wanted to write a piece of code for his company’s Examly Event Management System that will display customized welcome messages by taking Customers’ name as input. Help Nikhil on the task.

Input Format

First line of the input is a string that corresponds to a Customer’s name.

Output Format

Output should display the welcome message along with the Customer’s name.

Sample Input

```
Harry Potter
```

Sample Output

```
Hello Harry Potter ! Welcome to Examly Event Management System
```

Sample Input

```
Jarvis
```

Sample Output

```
Hello Jarvis ! Welcome to Examly Event Management System
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q9. **Problem statement:**
Write a simple code by declaring three variables where two variables are of integer type and one variable in double. Add the two integer variables and store the result in the remaining variable(double).

Input Format

Input to get two values n1 and n2 separated by single space.

Output Format

Display the result in double.

Sample Input

```
67 801
```

Sample Output

```
868.0
```

Sample Input

```
75 700
```

Sample Output

```
775.0
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q10. **Display Different Data Types**

Write a java program to get different types of data from the user and display the values.

Question Instructions:

1. Create a driver class named **Main**
2. The solution code should be written inside the main method() of the **Main** class

Input Format

First Line consists of an integer data
Second line consists of double data
Third Line consists of boolean value which is either true or false
Fourth line consists of a single character
Fifth line consists of a String input

Output Format

Refer the sample output

Sample Input

```
1
2.5
true
```

Sample Output

```
Integer value = 1
Double value = 2.5
Boolean value = true
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q11. ***Event Details***
Be it a last-minute get-together, a birthday party or a corporate event, the "Pine Tree" Event Management Company helps you plan and execute it better and faster. Nikhil, the founder of the company wanted the Examly Event Management System to get and display the event details from his Customers for every new order of the Company.

Write a program that will get the input of the event details like name of the event, type of the event, number of people expected, a string value (Y/N) telling whether the event is going to be a paid entry and the projected expenses (in lakhs) for the event. The program should then display the input values as formatted output.

Question Instructions:

1. Create a driver class named **Main**.
2. The solution code should be written inside the main method() of the **Main** class

Input Format

First input is a string that corresponds to the name of the event.
Second input is a string that corresponds to the type of the event.
Third input is an integer that corresponds to the number of people expected for the event.
Fourth input is a character that corresponds to Y/N telling whether the event is going to be a paid entry or not.
Fifth input is a double value that corresponds to the projected expenses (in lakhs) for the event.

Output Format

Output should display the event details.
Refer sample input and output for formatting specifications

Sample Input

```
food fest 2017
public
500
```

Sample Output

```
Event Name : food fest 2017
Event Type : public
Expected Count : 500
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q12. ***Display Student's Detail***

Write a program to obtain and display the newly joined student name and age detail.

Question Instructions:

1. Create a driver class named **Main**.
2. The solution code should be written inside the main method() of the **Main** class

Input Format

First input is a string that corresponds to the name of the student
Second input is an integer that corresponds to the age of student

Output Format

Output should display the details as given in the sample output.
<name> age is <age>

Sample Input

```
Ram
23
```

Sample Output

```
Ram age is 23
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q13. ***Play with Typecasting***

Write a simple code by declaring three variables where two variables are of integer type and one variable is double. Multiply the two integer variables and store the result in the remaining variable(double).

Question Instructions:

1. Create a driver class named **Main**.
2. The solution code should be written inside the main method() of the **Main** class

Input Format

Input to get two values n1 and n2 separated by single space.

Output Format

Display the result in double.

Sample Input

```
67 801
```

Sample Output

```
53667.0
```

Sample Input

```
45 5
```

Sample Output

```
225.0
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q14. Number of events

"Pine Tree" Company has signed up a big time Event Management deal from the Rotary Youth Club for a Trade Fair organized at Codissia Complex, wherein all startup companies in the Software industry are demonstrating their latest products and services and meet with industry partners and Customers.

Amphi Event Management System has to be modified to write a piece of code that will get the input of the number of events to be hosted for the Fair at Codissia from its users and display the same. Help the company to accomplish the requirement.

Input Format

First line of the input is an integer that corresponds to the number of events to be hosted at Codissia.

Output Format

Output should display the number of events to be hosted at Codissia.

Sample Input

```
50
```

Sample Output

```
Number of events hosted in Codissia is 50
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q15. **Total Expenses for the Event**

The prime functionality of an Event Management System is budgeting. An Event Management System should estimate the total expenses incurred by an event and the percentage rate of each of the expenses involved in planning and executing an event. Nikhil, the founder of "Pine Tree" wanted to include this functionality in his company's Amphi Event Management System and requested your help in writing a program for the same.
The program should get the branding expenses, travel expenses, food expenses and logistics expenses as input from the user and calculate the total expenses for an event and the percentage rate of each of these expenses.

Input Format

First input is a double value that corresponds to the branding expenses.
Second input is a double value that corresponds to the travel expenses.
Third input is a double value that corresponds to the food expenses.
Fourth input is a double value that corresponds to the logistics expenses.

Output Format

First line of the output should display the double value that corresponds to the total expenses for the Event.
Next four lines should display the percentage rate of each of the expenses.
Round off the output to two decimal digits.

Sample Input

```
20000
40000
15000
25000
```

Sample Output

```
Total expenses : Rs.100000.00
Branding expenses percentage : 20.00%
Travel expenses percentage : 40.00%
Food expenses percentage : 15.00%
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Answer Key & Solution

Section 1 - CODING

Q1

Test Case

Input

```
HAPPY
HOME
```

Output

```
HAPPY and HOME
```

Weightage - 10

Input

```
GREEN
ORANGE
```

Output

```
GREEN and ORANGE
```

Weightage - 10

Input

```
RAM
SITA
```

Output

```
RAM and SITA
```

Weightage - 10

Input

```
RAM
LEELA
```

Output

```
RAM and LEELA
```

Weightage - 10

Input

```
RED
BLUE
```

Output

```
RED and BLUE
```

Weightage - 10

Input

```
BLACK
WHITE
```

Output

```
BLACK and WHITE
```

Weightage - 10

Input

```
A
B
```

Output

```
A  and B
```

Weightage - 20

Input

```
C
E
```

Output

```
C and E
```

Weightage - 20

Sample Input

```
U
ME
```

Sample Output

```
U and ME
```

Sample Input

```
LOVE
LIVE
```

Sample Output

```
LOVE and LIVE
```

Solution

```
import java.util.Scanner;
class Main {
 public static void main(String[] args) {
 Scanner sc=new Scanner(System.in);
 String N;
 N=sc.nextLine();
 String m;
 m=sc.nextLine();
   System.out.println(N +" and "+ m);
 }
}
```

Q2

Test Case

Input	Output
15	15

Weightage - 100

Sample Input	Sample Output
26	26

Solution

```
import java.util.*;
class Main
{
    public static void main(String args[])
    {
        Scanner s=new Scanner(System.in);
        int n=s.nextInt();
        System.out.print(n);
    }
}
```

Q3

Test Case

Input	Output
26.28888	26.289 26.29 26.3

Weightage - 100

Sample Input	Sample Output
5.374675	5.375 5.37 5.4

Solution

```
import java.util.*;
class Main
{
    public static void main(String args[])
    {
        Scanner s=new Scanner(System.in);
        float n=s.nextFloat();
        System.out.printf("%.3f\n",n);
        System.out.printf("%.2f\n",n);
        System.out.printf("%.1f\n",n);
    }
}
```

Q4

Test Case

Input	Output

e	e

Weightage - 100

Sample Input **Sample Output**

d	d

Solution

```
import java.util.*;
class Main
{
    public static void main(String args[])
    {
    Scanner s=new Scanner(System.in);
    char a=s.next().charAt(0);
    System.out.print(a);
    }
}
```

Q5

Test Case

Input **Output**

26	26.0

Weightage - 100

Sample Input **Sample Output**

5	5.0

Solution

```
import java.util.*;
class Main
{
    public static void main(String args[])
    {
        Scanner s=new Scanner(System.in);
        int n=s.nextInt();
        System.out.print((float)n);
    }
}
```

Q6

Test Case

Input **Output**

100	d

Weightage - 100

Sample Input **Sample Output**

101	e

Solution

```
import java.util.*;
class Main
{
    public static void main(String args[])
    {
        Scanner s=new Scanner(System.in);
```

```
        int a=s.nextInt();
        System.out.print((char)a);
    }
}
```

Q7

Test Case

Input	Output
a	97

Weightage - 100

Sample Input	Sample Output
s	115

Solution

```
import java.util.*;
class Main
{
    public static void main(String args[])
    {
    Scanner s=new Scanner(System.in);
    char a=s.next().charAt(0);
    System.out.print((int)a);
    }
}
```

Q8

Test Case

Input	Output
Benny	Hello Benny ! Welcome to Examly Event Management System

Weightage - 50

Input	Output
Hermoine Granger	Hello Hermoine Granger ! Welcome to Examly Event Management System

Weightage - 50

Sample Input	Sample Output
Harry Potter	Hello Harry Potter ! Welcome to Examly Event Management System

Sample Input	Sample Output
Jarvis	Hello Jarvis ! Welcome to Examly Event Management System

Solution

Solution 1

Main.java

```
import java.util.*;
class Main {
    public static void main(String [] args) {
        String name;
        Scanner sc= new Scanner(System.in);
        name = sc.nextLine();
        System.out.println("Hello "+name+ " ! Welcome to Examly Event Management System");
    }
}
```

Q9

Test Case

Input

```
45 5
```

Output

```
50.0
```

Weightage - 50

Input

```
30 111
```

Output

```
141.0
```

Weightage - 50

Sample Input

```
67 801
```

Sample Output

```
868.0
```

Sample Input

```
75 700
```

Sample Output

```
775.0
```

Solution

Solution 1

Main.java

```
import java.util.Scanner;
class Main{
    public static void main(String args[]){
        int x,y;
        double z;
        Scanner sc=new Scanner(System.in);
        x=sc.nextInt();
        y=sc.nextInt();
        z=x+y;
        System.out.println(z);
    }
}
```

Q10

Test Case

Input

```
345654
34.4324223424
false
```

Output

```
Integer value = 345654
Double value = 34.4324223424
Boolean value = false
```

Weightage - 100

Sample Input

```
1
2.5
true
```

Sample Output

```
Integer value = 1
Double value = 2.5
Boolean value = true
```

Solution

```
import java.util.Scanner;
class Main
{
    public static void main(String[] args)
    {
        Scanner s = new Scanner(System.in);
        int n1 = s.nextInt();
        double n2 = s.nextDouble();
        boolean n3 = s.nextBoolean();
        s.nextLine();
        char c = s.nextLine().charAt(0);
```

```
        String n4  = s.nextLine();
        System.out.println("Integer value = " + n1 + "\nDouble value = " + n2 + "\nBoolean value = " + n3 + "\nchar value = " + c + "\nString value = " + n4);
    }
}
```

Q11

Test Case

Input

```
Book Exhibition
public
250
N
```

Output

```
Event Name : Book Exhibition
Event Type : public
Expected Count : 250
Paid Entry : N
```

Weightage - 10

Input

```
Car Show
private
850
Y
```

Output

```
Event Name : Car Show
Event Type : private
Expected Count : 850
Paid Entry : Y
```

Weightage - 10

Input

```
Exhibition 2019
public
1000
Y
```

Output

```
Event Name : Exhibition 2019
Event Type : public
Expected Count : 1000
Paid Entry : Y
```

Weightage - 15

Input

```
Raw Materials 2018
private
150
N
```

Output

```
Event Name : Raw Materials 2018
Event Type : private
Expected Count : 150
Paid Entry : N
```

Weightage - 15

Input

```
Diamond Exhibition
private
20
Y
```

Output

```
Event Name : Diamond Exhibition
Event Type : private
Expected Count : 20
Paid Entry : Y
```

Weightage - 20

Input

```
Coding Contest
public
10500
N
```

Output

```
Event Name : Coding Contest
Event Type : public
Expected Count : 10500
Paid Entry : N
```

Weightage - 20

Input

```
Aptitude test
private
10
N
```

Output

```
Event Name : Aptitude test
Event Type : private
Expected Count : 10
Paid Entry : N
```

Weightage - 10

Sample Input

```
food fest 2017
public
500
Y
```

Sample Output

```
Event Name : food fest 2017
Event Type : public
Expected Count : 500
Paid Entry : Y
```

Solution

```
import java.util.*;
import java.io.*;
class Eventdetails {
    public static void main(String[] args) {
        String name,type;
        double expenses;
        int number;
        char entry;
        Scanner sc = new Scanner(System.in);
```

```
        name = sc.nextLine();
        type = sc.nextLine();
        number = sc.nextInt();
        entry = sc.next().charAt(0);
        expenses = sc.nextDouble();
        System.out.println("Event Name : "+name);
        System.out.println("Event Type : "+type);
        System.out.println("Expected Count : "+number);
        System.out.println("Paid Entry : "+entry);
        System.out.println("Projected Expense : "+expenses+"L");
    }
}
```

Q12

Test Case

Input

```
Karthick
24
```

Output

```
Karthick age is 24
```

Weightage - 10

Input

```
JAANU
34
```

Output

```
JAANU age is 34
```

Weightage - 10

Input

```
BaBu
56
```

Output

```
BaBu age is 56
```

Weightage - 10

Input

```
JoJo
90
```

Output

```
JoJo age is 90
```

Weightage - 15

Input

```
Rakshan
25
```

Output

```
Rakshan age is 25
```

Weightage - 15

Input

```
Shiva
20
```

Output

```
Shiva age is 20
```

Weightage - 20

Input

```
Ramya
30
```

Output

```
Ramya age is 30
```

Weightage - 20

Sample Input

```
Ram
23
```

Sample Output

```
Ram age is 23
```

Solution

```
import java.util.*;
class Main{
    public static void main(String args[]){
        Scanner sc=new Scanner(System.in);
        String name = sc.nextLine();
        int age= sc.nextInt();
        System.out.println(name+" age is "+age);

    }
}
```

Q13

Test Case

Input	Output
30 111	3330.0

Weightage - 30

Input	Output
-2 -3	6.0

Weightage - 10

Input	Output
22 55	1210.0

Weightage - 10

Input	Output
90 20	1800.0

Weightage - 10

Input	Output
29 8	232.0

Weightage - 10

Input	Output
709 -67	-47503.0

Weightage - 10

Input	Output
222 222	49284.0

Weightage - 10

Input	Output
-89 56	-4984.0

Weightage - 10

Sample Input **Sample Output**

```
67 801
```

```
53667.0
```

Sample Input

Sample Output

```
45 5
```

```
225.0
```

Solution

```
import java.util.Scanner;
class Main{
    public static void main(String args[]){
        int x,y;
        double z;
        Scanner sc=new Scanner(System.in);
        x=sc.nextInt();
        y=sc.nextInt();
        z=x*y;
        System.out.println(z);
    }
}
```

Q14

Test Case

Input

Output

```
30
```

```
Number of events hosted in Codissia is 30
```

Weightage - 100

Sample Input

Sample Output

```
50
```

```
Number of events hosted in Codissia is 50
```

Solution

```
import java.util.*;
import java.io.*;
class Main {
    public static void main(String [] args) {
        int number;
        Scanner sc = new Scanner(System.in);
        number = sc.nextInt();
        System.out.println("Number of events hosted in Codissia is " +number);
    }
}
```

Q15

Test Case

Input

Output

```
20000
40000
15000
25000
```

```
Total expenses : Rs.100000.00
Branding expenses percentage : 20.00%
Travel expenses percentage : 40.00%
Food expenses percentage : 15.00%
```

Weightage - 100

Sample Input

Sample Output

```
20000
40000
15000
25000
```

```
Total expenses : Rs.100000.00
Branding expenses percentage : 20.00%
Travel expenses percentage : 40.00%
Food expenses percentage : 15.00%
```

Solution

```
import java.util.*;
import java.io.*;
import java.math.*;
import java.text.*;
class Main {
    public static void main(String [] args) {
        double branding,travel,food,logistics,sum = 0.00;
```

```
        DecimalFormat d  = new DecimalFormat("0.00");
        Scanner sc=new Scanner(System.in);
        branding = sc.nextDouble();
        travel = sc.nextDouble();
        food = sc.nextDouble();
        logistics = sc.nextDouble();
        sum = branding+travel+food+logistics;
        System.out.println("Total expenses : Rs." +d.format(sum));
        System.out.println("Branding expenses percentage : " +d.format((branding/sum)*100) +"%");
        System.out.println("Travel expenses percentage : "+d.format((travel/sum)*100) +"%");
        System.out.println("Food expenses percentage : "+d.format((food/sum)*100) +"%");
        System.out.println("Logistics expenses percentage : "+d.format((logistics/sum)*100) +"%");
    }
}
```