IRC_Java_D1_Java Basics_PAH_COD

Test Summary
- No. of Sections: 1
- No. of Questions: 10
- Total Duration: 120 min

Section 1 - Coding

Section Summary
- No. of Questions: 10
- Duration: 120 min

Additional Instructions:

None

Q1. **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	Sample Output
5	5.0

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

Q2. 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	Sample Output
50	Number of events hosted in Codissia is 50

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

Q3. **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	Sample Output
Harry Potter	Hello Harry Potter ! Welcome to Examly Event Managemen

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

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

Q4.   **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	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%

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

Q5.   **Problem statement:**
Write a program that accepts a sentence as input and prints the same.

Input Format

The input consists of a sentence.

Output Format

The output prints the sentence.

Sample Input	Sample Output
make life ridiculously amazing	make life ridiculously amazing

Time Limit: 10 ms Memory Limit: 256 kb Code Size: 1024 kb

Q6.   **Problem statement:**
Write a Java program to convert minutes into a number of years and days

Input Format

The input consists number of minutes

Output Format

The output prints year and days

Sample Input	Sample Output
456789	456789 minutes is approximately 0 years and 317 days

Sample Input	Sample Output
785342	785342 minutes is approximately 1 years and 180 days

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

Q7.   **Problem statement:**
          Write a program to print the size of int, float, double, and char.

Input Format

No console input.

Output Format

The output prints the size of each data type.

Sample Input	Sample Output
	Size of int: 4 bytes. Size of float: 4 bytes. Size of double: 8 bytes. Size of char: 1 bytes

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

Q8.   **Problem statement:**
          Welcome Message
          "Pine Tree" is a recently launched startup Event Management company. The company gained a good reputation within a short span because of its highly reliable service delivery.

          Nikhil, the founder of this company wished to take the company's services to the next step and decided 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 Proton Event Management System that will welcome all the Customers who are using it. Help Nikhil on the task.

Output Format

The output should display "Welcome to Proton Event Management System".
Refer sample output for formatting specifications.

Sample Input	Sample Output
	Welcome to Proton Event Management System

Time Limit: 10 ms Memory Limit: 256 kb Code Size: 1024 kb

Q9.   **Problem statement:**
          Write a program to print the ASCII value of a given character.

Input Format

The input consists of a character.

Output Format

The output prints the ASCII value.

Sample Input	Sample Output

k	107

Sample Input | **Sample Output**

U	85

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

Q10.   **Problem statement:**
        Write a simple code by declaring three variables where two variables of integer type and one variable is float. Add the two integer variables and store the result in the remaining variable(float).

Input Format

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

Output Format

Display the result in double.

Sample Input | **Sample Output**

10 20	30.00

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

Answer Key & Solution

Section 1 - Coding

Q1

Test Case

Input	Output
26	26.0

Weightage - 100

Sample Input	Sample Output
5	5.0

Solution

```java
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);
    }
}
```

Q2

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

```java
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);
```

```
        }
    }
```

Q3

Test Case

Input	Output
Benny	Hello Benny ! Welcome to Examly Event Management

Weightage - 50

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

Weightage - 50

Sample Input	Sample Output
Harry Potter	Hello Harry Potter ! Welcome to Examly Event Mana

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

Solution

Solution 1

Main.java

```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");
    }
}
```

Q4

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

```
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%
```

Solution

```java
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) +"%");
    }
}
```

Q5

Test Case

Input

```
make life ridiculously amazing
```

Output

```
make life ridiculously amazing
```

Weightage - 20

Input

```
live laugh love
```

Output

```
live laugh love
```

Weightage - 20

Input

```
work for it
```

Output

```
work for it
```

Weightage - 20

Input

```
never work for it
```

Output

```
never work for it
```

Weightage - 20

Input

```
actions are priceless
```

Output

```
actions are priceless
```

Weightage - 20

Sample Input

```
make life ridiculously amazing
```

Sample Output

```
make life ridiculously amazing
```

Solution

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

Q6   **Test Case**

Input

```
4578234
```

Output

```
4578234 minutes is approximately 8 years and 259 d
```

Weightage - 50

Input

```
783456
```

Output

```
783456 minutes is approximately 1 years and 179 da
```

Weightage - 50

Sample Input

```
456789
```

Sample Output

```
456789 minutes is approximately 0 years and 317 d
```

Sample Input

785342

Sample Output

785342 minutes is approximately 1 years and 180 d[...]

Solution

```java
import java.util.Scanner;
public class Main {
    public static void main(String[] Strings) {
        double minutesInYear = 60 * 24 * 365;
        Scanner input = new Scanner(System.in);
        double min = input.nextDouble();
        long years = (long) (min / minutesInYear);
        int days = (int) (min / 60 / 24) % 365;
        System.out.println((int) min + " minutes is approximately " + years + " years and " + days + " days");
    }
}
```

Q7

Test Case

Input

Output

```
Size of int: 4 bytes.
Size of float: 4 bytes.
Size of double: 8 bytes.
Size of char: 2 bytes.
```

Weightage - 100

Sample Input

Sample Output

```
Size of int: 4 bytes.
Size of float: 4 bytes.
Size of double: 8 bytes.
Size of char: 2 bytes.
```

Solution

Header

```java
import java.util.*;
class Main
{
    public static  void main(String args[])
    {
```

```java
        System.out.println("Size of int: " + (Integer.SIZE/8) + " bytes.");
        System.out.println("Size of float: " + (Float.SIZE/8) + " bytes.");
        System.out.println("Size of double: " + (Double.SIZE/8) + " bytes.");
        System.out.println("Size of char: " + (Character.SIZE/8) + " bytes.");
```

Footer

```
      }
    }
```

Q8

Test Case

Input	Output
	Welcome to Proton Event Management System

Weightage - 100

Sample Input	Sample Output
	Welcome to Proton Event Management System

Solution

```
  import java.util.*;
  class Main
  {
      public static void main(String args[])
      {
          System.out.println("Welcome to Proton Event Management System");
      }
  }
```

Q9

Test Case

Input	Output
L	76

Weightage - 25

Input	Output
A	65

Weightage - 25

Input	Output
a	97

Weightage - 25

Input	Output
e	101

Weightage - 25

Sample Input	Sample Output
k	107

Sample Input	Sample Output
U	85

Solution

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

Q10   **Test Case**

Input	Output
32 42	74.00

Weightage - 25

Input	Output
88 44	132.00

Weightage - 25

Input	Output
846 888	1734.00

Weightage - 25

Input

32 44

Output

76.00

Weightage - 25

Sample Input

10 20

Sample Output

30.00

Solution

```java
import java.util.*;
class Main
{
    public static void main(String args[])
    {
        Scanner s = new Scanner(System.in);
        int n1,n2;
        float sum=0;
        n1=s.nextInt();
        n2=s.nextInt();
        sum = (float)n1+(float)n2;
        System.out.printf("%.2f",sum);
    }
}
```