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| Sno | Problem\_Statement | Solution |
| **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 Amphi 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. Assume that the maximum length of the string is 50.  **Output Format:** Output should display the welcome message along with the Customer’s name. Refer sample input and output for formatting specifications. **[All text in bold corresponds to input and rest corresponds to output.]**  **Sample Input and Output:** Enter your name **Beena** Hello Beena ! Welcome to Amphi Event Management System | import java.util.Scanner;  class Main {  public static void main(String[] args) {    Scanner sc=new Scanner(System.in);  System.out.println("Enter your name");  String name=sc.nextLine();  int n=name.length();  if(n<=50)  {  System.out.println("Hello "+name+" ! Welcome to Amphi Event Management System");  }  }  } |
| 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 int value that corresponds to the branding expenses. Second input is a int value that corresponds to the travel expenses. Third input is a int value that corresponds to the food expenses. Fourth input is a int value that corresponds to the logistics expenses.   **Output Format:** First line of the output should display the int value that corresponds to the total expenses for the Event. Next four lines should display the percentage rate of each of the expenses. Refer sample input and output for formatting specifications. **[All text in bold corresponds to input and rest corresponds to output.]**  **Sample Input and Output:** Enter branding expenses **20000** Enter travel expenses **40000** Enter food expenses **15000** Enter logistics expenses **25000** Total expenses : Rs.100000.00 Branding expenses percentage : 20.00% Travel expenses percentage : 40.00% Food expenses percentage : 15.00% Logistics expenses percentage : 25.00% Additional Sample TestCases **Sample Input and Output 1 :**  Enter branding expenses  855  Enter travel expenses  877779  Enter food expenses  5544  Enter logistics expenses  2256  Total expenses : Rs.886434.00  Branding expenses percentage : 0.10%  Travel expenses percentage : 99.02%  Food expenses percentage : 0.63%  Logistics expenses percentage : 0.25% | import java.util.Scanner;  import java.text.DecimalFormat;  class Main {  public static void main(String[] args) {  DecimalFormat df = new DecimalFormat("0.00");  Scanner sc = new Scanner(System.in);  System.out.println("Enter branding expenses");  int branding = sc.nextInt();  System.out.println("Enter travel expenses");  int travel = sc.nextInt();  System.out.println("Enter food expenses");  int food = sc.nextInt();  System.out.println("Enter logistics expenses");  int logistics = sc.nextInt();  double totalexpense = branding+food+travel+logistics;  double brandingper=branding\*100/totalexpense;  double travelingper=travel\*100/totalexpense;  double foodper=food\*100/totalexpense;  double logisticsper=logistics\*100/totalexpense;  System.out.println("Total expenses : Rs."+df.format(totalexpense));  System.out.println("Branding expenses percentage : "+df.format(brandingper)+"%");  //System.out.print("% \n");  System.out.println("Travel expenses percentage : " +df.format(travelingper)+"%");  //cimalFormat df1 = new DecimalFormat("#.##");  System.out.println("Food expenses percentage : "+df.format(foodper)+"%");  System.out.println("Logistics expenses percentage : " +df.format(logisticsper)+"%");  }  } |
| THRILL RIDE | "Fantasy Kingdom" is a brand new Amusement park that is going to be inaugurated shortly in the City and is promoted as the place for breath-taking charm. The theme park has more than 30 exhilarating and thrilling rides and as a special feature of the park, the park Authorities have placed many Booking Kiosks at the entrance which would facilitate the public to purchase their entrance tickets and ride tickets. There are few rides in the park which are not suitable for Children and aged people, hence the park Authorities wanted to program the kiosks to issue the tickets based on people’s age. If the age given is less than 15 (Children) or greater than 60 (Aged), then the system should display as "Not Allowed", otherwise it should display as "Allowed". Write a block of code to help the Authorities program this functionality. **Input Format:** First line of the input is an integer that corresponds to the age of the person opting for the ride. **Output Format:** Output should display "Allowed" or "Not Allowed" based on the conditions given. Refer sample input and output for formatting specifications. **Sample Input 1:** 20 **Sample Output 1:** Allowed **Sample Input 2:** 12 **Sample Output 2:** Not Allowed  Top of Form  Bottom of Form | import java.util.\*;  import java.io.\*;  class Main{  public static void main(String[] args) throws Exception{  Scanner sc=new Scanner(System.in);  int age=sc.nextInt();  if((age<15)||(age>60)){  System.out.println("Not Allowed");  }else{    System.out.println("Allowed");}  }  } |
| CHARACTER PATTERN 3 | Write a program to generate a rectangular pattern of stars.  \*  \*\*  \*\*\*  \*\*\*\*  \*\*\*\*\*    **Input and Output Format:**  Input consists of a single integer that corresponds to n, the number of rows.    **Sample Input 1:**  5    **Sample Output 1:**  \*  \*\*  \*\*\*  \*\*\*\*  \*\*\*\*\* | import java.util.\*;  import java.io.\*;  class Main{  public static void main(String[] args) throws Exception{  Scanner sc=new Scanner(System.in);  int n=sc.nextInt();  for(int i=1;i<=n;i++){  for(int j=1;j<=i;j++){  System.out.print("\*");  }  System.out.println();  }  }  } |
| AAYUSH'S SCHOLARSHIP | Aayush studies in Teswan National University. Now is the time for exam results. Aayush similar to other students, hopes that his scores in 5 subjects in the exam could fetch him a scholarship for his GRE preparation.   The following simple rules  are used to find whether he is eligible to receive scholarship:   * University follows **5** point grading system. In an exam, a student can receive any score from 2 to 5.  2 is called an F grade, meaning that student has failed that exam. * Student should not have fail any of the exams. * Student must obtain a full score in some of his/her exams to show that he/she is excellent in some of the subjects. * He/She must have a grade point average not less than **4.0**   ​You are given information regarding how Aayush performed in those 5 subjects . Help him determine whether he will receive the scholarship or not.   **Input Format:** The input contains 5 integers denoting Aayush’s 5 subjects score in the exam.   **Output Format:** Output a single line - "Yes" (without quotes) if Aayush will receive scholarship, or "No" (without quotes) otherwise. Refer sample input and output for formatting specifications.  **Sample Input 1:** Enter the subject1 mark **3** Enter the subject2 mark **5** Enter the subject3 mark **4** Enter the subject4 mark **4** Enter the subject5 mark **3**  **Sample Output 1:** No  **Sample Input 2:** Enter the subject1 mark **3** Enter the subject2 mark **4** Enter the subject3 mark **4** Enter the subject4 mark **4** Enter the subject5 mark **5**  **Sample Output 2:** Yes | import java.util.\*;  import java.io.\*;  class Main {  public static void main(String[] args) {  int sub1, sub2, sub3, sub4, sub5;  Scanner scan = new Scanner(System.in);  System.out.println("Enter the subject1 mark");  sub1 = scan.nextInt();  System.out.println("Enter the subject2 mark");  sub2 = scan.nextInt();  System.out.println("Enter the subject3 mark");  sub3 = scan.nextInt();  System.out.println("Enter the subject4 mark");  sub4 = scan.nextInt();  System.out.println("Enter the subject5 mark");  sub5 = scan.nextInt();  if(sub1==5||sub2==5||sub3==5||sub4==5||sub5==5)  {  if(sub1==2||sub2==2||sub3==2||sub4==2||sub5==2)  System.out.println("No");  else if((sub1+sub2+sub3+sub4+sub5)/5.0>=4.0)  System.out.println("Yes");  else  System.out.println("No");  }  else  System.out.println("No");  }  } |
| **Series 1** | The Event Organizing Company "Buzzcraft" focuses event management in a way that creates a win-win situation for all involved stakeholders. Buzzcraft don't look at building one time associations with clients, instead, aim at creating long-lasting collaborations that will span years to come. This goal of the company has helped them to evolve and gain more clients within notable time. The number of clients of the company from the start day of their journey till now is recorded sensibly and is seemed to have followed a specific series like: 2,3,5,7,11,13,17,19, 23 ...   Write a program which takes an integer N as the input and will output the series till the Nth term.   **Input Format:** First line of the input is an integer N.  **Output Format:** Output a single line the series till Nth term, each separated by a comma. Refer sample input and output for formatting specifications.  **Sample Input 1:** 5  **Sample Output 1:** 2 3 5 7 11  **Sample Input 2:** 10  **Sample Output 2:** 2 3 5 7 11 13 17 19 23 29 | import java.util.Scanner;  public class Main {  public static void main(String[] args) {  Scanner s = new Scanner(System.in);  int a = Integer.parseInt(s.nextLine());  int ct=0,n=0,i=1,j=1;  while(n<a) {  j=1;  ct=0;  while(j<=i) {  if(i%j==0){  ct++;  }  j++;  }  if(ct==2) {  System.out.printf("%d ",i);  n++;  }  i++;  }  }  } |
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| **Display Item Type** | The International Film Festival of India (IFFI), founded in 1952, is one of the most significant film festivals in Asia. The festival is for a weel and arrangements have to be made for food, chairs, tables, etc. The organizing committee plans to deposit the advance amount to the contractors on conformation of boking. Help them to store these details and print them in detailed view.  Write a Java program to get item type, cost per day and deposit amount from user and display these details in a detailed view using the following classes and methods.  **[Note : Strictly adhere to the object oriented specifications given as a part of the problem statement. Follow the naming conventions as mentioned. Create separate classes in separate files.]** Create a class named **ItemType**with the following private member variables / attributes.   |  |  | | --- | --- | | **Data Type** | **Variable** | | String | name | | double | costPerDay | | double | deposit |   Include appropriate **getters and setters.** In the **ItemType**class include the following methods.   |  |  | | --- | --- | | **Method** | **Description** | | void display( ) | In this method, display the details of the ItemType in the format shown in the sample output. Include the statement ‘Item type details’ inside this method |   Create an another class **Main**and write a main method to test the above class.  In the main( ) method, read the item type details from the user and call the display( ) method. **Example of getters and setters** private String name; public String getName( ) {         return name; } public void setName(String name) {         this.name = name; } private double costPerDay; public double getCostPerDay( ) {         return name; } public void setCostPerDay(double costPerDay) {         this.costPerDay = costPerDay; } private double deposit; public double getDeposit( ) {         return name; } public void setDeposit(double deposit) {         this.deposit = deposit; } **Input and Output Format:** Refer sample input and output for formatting specifications. Cost per day and Deposit value should be displayed upto 2 decimal places. **All text in bold correspondstoinput and the rest corresponds to output.**  **Sample Input and Output 1:** Enter the item type name **Catering** Enter the cost per day **25000.00** Enter the deposit **10000.50** Item type details Name : Catering CostPerDay : 25000.00 Deposit : 10000.50 | import java.text.DecimalFormat;  public class ItemType {  private String name;  private double costPerDay,deposit;  public String getName() {  return name;  }  public void setName(String name) {  this.name = name;  }  public double getCostPerDay() {  return costPerDay;  }  public void setCostPerDay(double costPerDay) {  this.costPerDay = costPerDay;  }  public double getDeposit() {  return deposit;  }  public void setDeposit(double deposit) {  this.deposit = deposit;  }  public void display(){  DecimalFormat df=new DecimalFormat("0.00");  System.out.println("Item type details");  System.out.println("Name : "+getName());  System.out.println("CostPerDay : "+df.format(getCostPerDay()));  System.out.println("Deposit : "+df.format(getDeposit()));  }  }  import java.io.\*;  import java.util.Scanner;  class Main{  public static void main(String[] args) throws Exception {  ItemType i = new ItemType();  Scanner sc = new Scanner(System.in);  System.out.println("Enter the item type name");  i.setName(sc.nextLine());  System.out.println("Enter the cost per day");  i.setCostPerDay(sc.nextDouble());  System.out.println("Enter the deposit");  i.setDeposit(sc.nextDouble());  i.display();  }  } |
| COMPARE PHONE NUMBER - JAVA | Little App helps you discover great places to eat around or de-stress in all major cities across 20000+ merchants. Explore restaurants, spa & salons and activities to find your next fantastic deal. The development team of Little App seeks your help to find the duplication of user accounts.   Write a Java program to get two users details and display whether their phone numbers are same or not with the following class and methods.  **[Note : Strictly adhere to the object-oriented specifications given as a part of the problem statement.** **Follow the naming conventions as mentioned. Create separate classes in separate files.]**  Create a class named **User** with the following private attributes/variables.   |  |  | | --- | --- | | **Date Type** | **Variable** | | String | name | | String | username | | String | password | | long | phoneNo |   Include appropriate getters and setters. Include four-argument  constructor with parameters in the following order, **public User(String name, String username, String password, long phoneNo)**  Include the following method in **User** class.   |  |  | | --- | --- | | **Method** | **Description** | | public boolean comparePhoneNumber(User user) | In this method, compare the phone number of the two user and return true if both the numbers are equal else return false |   Create another class **Main**and write a main method to test the above class.  **Input and Output Format** Refer sample input and output for formatting specifications. **All text in bold corresponds to the input and the rest corresponds to output.  Sample Input/Output 1** Enter Name **john** Enter UserName **john@123** Enter Password **john@123** Enter PhoneNo **9092314562** Enter Name **john** Enter UserName **john@12** Enter Password **john@12** Enter PhoneNo **9092314562** Same Users  **Sample Input/Output 2** Enter Name **ram** Enter UserName **ram####** Enter Password **ram** Enter PhoneNo **9092314562** Enter Name **john** Enter UserName **john@123** Enter Password **john@123** Enter PhoneNo **9092312102** Different Users  Top of Form  Bottom of Form | import java.util.Scanner;  import java.text.DecimalFormat;  class Main {  public static void main(String[] args) {  DecimalFormat df = new DecimalFormat("0.00");  Scanner sc = new Scanner(System.in);  System.out.println("Enter branding expenses");  int branding = sc.nextInt();  System.out.println("Enter travel expenses");  int travel = sc.nextInt();  System.out.println("Enter food expenses");  int food = sc.nextInt();  System.out.println("Enter logistics expenses");  int logistics = sc.nextInt();  double totalexpense = branding+food+travel+logistics;  double brandingper=branding\*100/totalexpense;  double travelingper=travel\*100/totalexpense;  double foodper=food\*100/totalexpense;  double logisticsper=logistics\*100/totalexpense;  System.out.println("Total expenses : Rs."+df.format(totalexpense));  System.out.println("Branding expenses percentage : "+df.format(brandingper)+"%");  //System.out.print("% \n");  System.out.println("Travel expenses percentage : " +df.format(travelingper)+"%");  //cimalFormat df1 = new DecimalFormat("#.##");  System.out.println("Food expenses percentage : "+df.format(foodper)+"%");  System.out.println("Logistics expenses percentage : " +df.format(logisticsper)+"%");  }  } |
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| CHARACTER PATTERN 3 | Write a program to generate a rectangular pattern of stars.  \*  \*\*  \*\*\*  \*\*\*\*  \*\*\*\*\*    **Input and Output Format:**  Input consists of a single integer that corresponds to n, the number of rows.    **Sample Input 1:**  5    **Sample Output 1:**  \*  \*\*  \*\*\*  \*\*\*\*  \*\*\*\*\* | import java.util.\*;  import java.io.\*;  class Main{  public static void main(String[] args) throws Exception{  Scanner sc=new Scanner(System.in);  int n=sc.nextInt();  for(int i=1;i<=n;i++){  for(int j=1;j<=i;j++){  System.out.print("\*");  }  System.out.println();  }  }  } |
| AAYUSH'S SCHOLARSHIP | Aayush studies in Teswan National University. Now is the time for exam results. Aayush similar to other students, hopes that his scores in 5 subjects in the exam could fetch him a scholarship for his GRE preparation.   The following simple rules  are used to find whether he is eligible to receive scholarship:   * University follows **5** point grading system. In an exam, a student can receive any score from 2 to 5.  2 is called an F grade, meaning that student has failed that exam. * Student should not have fail any of the exams. * Student must obtain a full score in some of his/her exams to show that he/she is excellent in some of the subjects. * He/She must have a grade point average not less than **4.0**   ​You are given information regarding how Aayush performed in those 5 subjects . Help him determine whether he will receive the scholarship or not.   **Input Format:** The input contains 5 integers denoting Aayush’s 5 subjects score in the exam.   **Output Format:** Output a single line - "Yes" (without quotes) if Aayush will receive scholarship, or "No" (without quotes) otherwise. Refer sample input and output for formatting specifications.  **Sample Input 1:** Enter the subject1 mark **3** Enter the subject2 mark **5** Enter the subject3 mark **4** Enter the subject4 mark **4** Enter the subject5 mark **3**  **Sample Output 1:** No  **Sample Input 2:** Enter the subject1 mark **3** Enter the subject2 mark **4** Enter the subject3 mark **4** Enter the subject4 mark **4** Enter the subject5 mark **5**  **Sample Output 2:** Yes | import java.util.\*;  import java.io.\*;  class Main {  public static void main(String[] args) {  int sub1, sub2, sub3, sub4, sub5;  Scanner scan = new Scanner(System.in);  System.out.println("Enter the subject1 mark");  sub1 = scan.nextInt();  System.out.println("Enter the subject2 mark");  sub2 = scan.nextInt();  System.out.println("Enter the subject3 mark");  sub3 = scan.nextInt();  System.out.println("Enter the subject4 mark");  sub4 = scan.nextInt();  System.out.println("Enter the subject5 mark");  sub5 = scan.nextInt();  if(sub1==5||sub2==5||sub3==5||sub4==5||sub5==5)  {  if(sub1==2||sub2==2||sub3==2||sub4==2||sub5==2)  System.out.println("No");  else if((sub1+sub2+sub3+sub4+sub5)/5.0>=4.0)  System.out.println("Yes");  else  System.out.println("No");  }  else  System.out.println("No");  }  } |
| **Series 1** | The Event Organizing Company "Buzzcraft" focuses event management in a way that creates a win-win situation for all involved stakeholders. Buzzcraft don't look at building one time associations with clients, instead, aim at creating long-lasting collaborations that will span years to come. This goal of the company has helped them to evolve and gain more clients within notable time. The number of clients of the company from the start day of their journey till now is recorded sensibly and is seemed to have followed a specific series like: 2,3,5,7,11,13,17,19, 23 ...   Write a program which takes an integer N as the input and will output the series till the Nth term.   **Input Format:** First line of the input is an integer N.  **Output Format:** Output a single line the series till Nth term, each separated by a comma. Refer sample input and output for formatting specifications.  **Sample Input 1:** 5  **Sample Output 1:** 2 3 5 7 11  **Sample Input 2:** 10  **Sample Output 2:** 2 3 5 7 11 13 17 19 23 29 | import java.util.Scanner;  public class Main {  public static void main(String[] args) {  Scanner s = new Scanner(System.in);  int a = Integer.parseInt(s.nextLine());  int ct=0,n=0,i=1,j=1;  while(n<a) {  j=1;  ct=0;  while(j<=i) {  if(i%j==0){  ct++;  }  j++;  }  if(ct==2) {  System.out.printf("%d ",i);  n++;  }  i++;  }  }  } |
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