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| --- | --- | --- |
|  | | |
|  | | |  |
|  | | import java.util.ArrayList; | |
|  | import java.util.List; | | |
|  | import java.util.Scanner; | | |
|  | import java.math.BigInteger; | | |
|  |  | | |
|  | public class acad { | | |
|  |  | | |
|  |  | | |
|  | /\* public static void main(String args[]) | | |
|  | { | | |
|  | //Task1 -- Write a java code with the class named ‘acad’ and a method ‘main’. Hard Code the program | | |
|  | with two integers and print the sum of those two. | | |
|  | /\*int x,y,z; | | |
|  | x=10; | | |
|  | y=20; | | |
|  | z=x+y; | | |
|  | System.out.println("sum of x+y="+z);\*/ | | |
|  |  | | |
|  | //Task2 -- Rewrite the above code, where, inputs are provided by the user at runtime and the output is printed. | | |
|  | /\* String number1, number2; | | |
|  | Scanner in = new Scanner(System.in); | | |
|  |  | | |
|  | System.out.println("Enter first large number"); | | |
|  | number1 = in.nextLine(); | | |
|  |  | | |
|  | System.out.println("Enter second large number"); | | |
|  | number2 = in.nextLine(); | | |
|  |  | | |
|  | BigInteger first = new BigInteger(number1); | | |
|  | BigInteger second = new BigInteger(number2); | | |
|  | BigInteger sum; | | |
|  |  | | |
|  | sum = first.add(second); | | |
|  |  | | |
|  | System.out.println("Result of addition = " + sum); | | |
|  |  | | |
|  | }\*/ | | |
|  | //Task3 -- Write a program with method name sum() that accepts two parameters from user and print | | |
|  | //the sum of two numbers. Output format should be as: | | |
|  | /\* int c; | | |
|  | void addition(int x,int y) | | |
|  | { | | |
|  | c=x+y; | | |
|  | } | | |
|  | public static void main(String[] arg) | | |
|  | { | | |
|  | int a,b; | | |
|  | Scanner sc=new Scanner(System.in); | | |
|  | System.out.println("First number is:"); | | |
|  | a=sc.nextInt(); | | |
|  | System.out.println("Second number is:"); | | |
|  | b=sc.nextInt(); | | |
|  | acad r=new acad(); | | |
|  | r.addition(a,b); | | |
|  | System.out.println("Sum is : "+r.c); | | |
|  | }\*/ | | |
|  |  | | |
|  | //Task 4 -- Write a program to accepts two numbers from stdin and find all the odd as well as even | | |
|  | //numbers present in between them. | | |
|  | /\* public static void main(String args[]) | | |
|  | { | | |
|  | String number1, number2; | | |
|  | Integer intNumber1, intNumber2; | | |
|  | List<Integer> oddList = new ArrayList<Integer>(); | | |
|  | List<Integer> evenList = new ArrayList<Integer>(); | | |
|  |  | | |
|  | Scanner in = new Scanner(System.in); | | |
|  |  | | |
|  | System.out.println("Enter first large number"); | | |
|  | intNumber1 = Integer.parseInt(in.nextLine()); | | |
|  |  | | |
|  | System.out.println("Enter second large number"); | | |
|  | intNumber2 = Integer.parseInt(in.nextLine()); | | |
|  |  | | |
|  | for(int i=intNumber1; i<=intNumber2; i++) | | |
|  | { | | |
|  | //even numbers | | |
|  | if(i%2 == 0) | | |
|  | { | | |
|  | oddList.add(i); | | |
|  | } else { //odd numbers | | |
|  | evenList.add(i); | | |
|  | } | | |
|  | } | | |
|  | System.out.println("Odd numbers list:"); | | |
|  | for (Integer odd: oddList){ | | |
|  | System.out.println(odd); | | |
|  | } | | |
|  | System.out.println("Even numbers list:"); | | |
|  | for(Integer even: evenList){ | | |
|  | System.out.println(even); | | |
|  | } | | |
|  | }\*/ | | |
|  |  | | |
|  | //Task 5 -- 5) Joe is scared to go to school. When her dad asked the reason, joe said she is unable to | | |
|  | // complete the task given by her teacher. The task was to find the “first 10 multiples” of the | | |
|  | //number entered from stdin . | | |
|  | /\*public static void main(String args[]) { | | |
|  |  | | |
|  | String number1; | | |
|  |  | | |
|  | Integer intNumber1; | | |
|  | Scanner in = new Scanner(System.in); | | |
|  |  | | |
|  | System.out.println("Enter number to print the multiples:"); | | |
|  | intNumber1 = Integer.parseInt(in.nextLine()); | | |
|  |  | | |
|  | for (int i=1; i<=10;i++ ){ | | |
|  | System.out.printf("%d \* %d = %d\n",intNumber1, i, intNumber1\*i); | | |
|  | } | | |
|  | }\*/ | | |
|  |  | | |
|  | //Task6 -- Write a program consisting method sum() and demonstrate the concept of method | | |
|  | //overloading using this method. | | |
|  | /\*static int add(int a, int b) { | | |
|  | return a + b; | | |
|  | } | | |
|  |  | | |
|  | static double add(double a, double b) { | | |
|  | return a + b; | | |
|  | } | | |
|  |  | | |
|  |  | | |
|  | public static void main(String[] args) { | | |
|  | System.out.println(acad.add(11, 11)); | | |
|  | System.out.println(acad.add(12.3, 12.6)); | | |
|  | }\*/ | | |
|  |  | | |
|  | //Task 7 -- Can you overload a method with same return type.? Explain your answer with proper logic. | | |
|  | //Overloaded methods in java may have different return types given that the argument lists are also different. | | |
|  | // The compiler does not consider return type when differentiating methods, so you cannot declare two methods with | | |
|  | // the same signature even if they have a different return type | | |
|  |  | | |
|  | //Java are only allowed for methods with different signatures. | | |
|  |  | | |
|  | //The return type is not part of the method signature, hence cannot be used to distinguish overloads. | | |
|  |  | | |
|  | //Task 8 -- Write a program in java using Arrays, that sorts the element in descending order. | | |
|  | public static void main(String[] args) | | |
|  | { | | |
|  | int n, temp; | | |
|  | Scanner s = new Scanner(System.in); | | |
|  | System.out.print("Enter no. of elements you want in array:"); | | |
|  | n = s.nextInt(); | | |
|  | int a[] = new int[n]; | | |
|  | System.out.println("Enter all the elements:"); | | |
|  | for (int i = 0; i < n; i++) | | |
|  | { | | |
|  | a[i] = s.nextInt(); | | |
|  | } | | |
|  | for (int i = 0; i < n; i++) | | |
|  | { | | |
|  | for (int j = i + 1; j < n; j++) | | |
|  | { | | |
|  | if (a[i] < a[j]) | | |
|  | { | | |
|  | temp = a[i]; | | |
|  | a[i] = a[j]; | | |
|  | a[j] = temp; | | |
|  | } | | |
|  | } | | |
|  | } | | |
|  | System.out.print("Descending Order:"); | | |
|  | for (int i = 0; i < n - 1; i++) | | |
|  | { | | |
|  | System.out.print(a[i] + ","); | | |
|  | } | | |
|  | System.out.print(a[n - 1]); | | |
|  | } | | |
|  | } | | |