Practice No. : 2

Topic : Introduction to Java

Date : 03-05-2024

Solve the following problems

Question No.	Question Detail	Level
1	Determine whether to sleep in based on two conditions: 'weekday' and 'vacation'. If it's not a weekday or if we're on vacation, we sleep in. Write Java code to determine whether we sleep in or not. Sample Input: false false Sample Output: true Sample Input:true false Sample Output: false Sample Input: false true Sample Output: true	Easy
2	Determine whether we are in trouble based on the smiling status of two monkeys, 'aSmile' and 'bSmile'. We are in trouble if both monkeys are smiling or if neither of them is smiling. Return true if we are in trouble Sample Input: false false Sample Output: true Sample Input: true true Sample Output: true Sample Input: false true Sample Output: false	Easy

3	Given two integer values, calculate their sum. If the two values are the same, return double their sum; otherwise, return their sum. Sample Input: 1 2 Sample Output: 3 Sample Input: 3 2 Sample Output: 5 Sample Input: 2 2 Sample Output: 8	Easy
4	We have a loud-talking parrot. The "hour" parameter is the current hour time in the range 0..23. We are in trouble if the parrot is talking and the hour is before 7 or after 20. Print true if we are in trouble. Sample Input: 6 true Sample Output: true Sample Input: 7 true Sample Output: false Sample Input: 6 false Sample Output: false	Easy
5	We're hosting a party with tea and candy. The outcome of the party is encoded as follows: 0=bad, 1=good, or 2=great. A party is considered good (1) if both tea and candy are at least 5. If either tea or candy is at least double the amount of the other one, the party is great (2). However, if either tea or candy is less than 5, the party is always bad (0). Sample Input: 6 8 Sample Output: 1 Sample Input: 3 8	Easy

	Sample Output: 0 Sample Input: 20 6 Sample Output: 2	
6	Identify the required variables to store the information of a mobile for a mobile shop. Create and show the sample data.	Easy
7	Do the following and explore what is happening. (Print the values to see the impact) a. Initialize an integer variable 'price' with the value 52 and assign it to a float variable 'priceInFloat'. b. Initialize a byte variable 'age' with the value 83 and assign it to an integer variable 'intAge'. c. Initialize an integer variable 'highestAge' to 120 and assign it to a byte variable 'byteAge'. d. Change the value of 'highestAge' to 130 and assign it to 'byteAge'.	Easy
8	If the selling price of 15 items and total profit earned on them is input through the keyboard, write a program to find the cost price of one item. Sample Input: 60,30 Sample Output: 2 Sample Input: 225, 45 Sample Output: 12	Easy
9	Given 2 non-negative ints, a and b, return their sum, so long as the sum has the same number of digits as a. If the sum has more digits than a, just return a without b. Sample Input: 2 3 Sample Output: 5 Sample Input: 8 3 Sample Output: 8	Easy
10	Given an int n, return the string form of the number followed by "!". So the int 6 yields "6!". Except if the number is divisible by 3 use "Fizz" instead of the number, and if the number is divisible by 5 use "Buzz", and if divisible by both 3 and 5, use "FizzBuzz". Note: the % "mod" operator computes the remainder after division, so	Easy

	23 % 10 yields 3. What will the remainder be when one number divides evenly into another?	