

# Practice Assignments For Core Java

Monday, November 22, 2021 3:16 PM

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| 1  | <p>Write a class <code>study.practice.Example</code> that has following methods</p> <ul style="list-style-type: none"><li>a. <code>Public static void sample1()</code><br/>This static method should print hello</li><li>b. <code>Public void sample2()</code><br/>This non static method should print welcome</li></ul> <p style="text-align: right;">done</p> <p>Write a class <code>User</code> in same package with starting point main<br/>Call <code>sample1</code> and <code>sample2</code></p>   |
| 2  | <p>Write a class <code>study.practice.ExpenseDetails</code> that has following -</p> <ul style="list-style-type: none"><li>a. Properties are <code>expenseDescription - String</code> , <code>expenseAmount double</code>, <code>expenseDate MyDate</code></li><li>b. Write a <code>toString</code> method</li><li>c. Write <code>equals</code> method</li><li>d. Write only a default constructor , getters and setters</li><li>e. Write a <code>MyDate</code> class having <code>day,month,year</code> , constructors, getters setters and <code>toString</code></li><li>f. Write a user class that creates 3 <code>ExpenseDetails</code> objects by accepting values from users<br/>Print the 3 objects using <code>toString</code><br/>Check if any 2 objects have same content - if yes show that there is duplicate expense</li></ul> <p style="text-align: right;">done</p>   |
| 3  | <p>Write a class <code>study.practice.MonthlyExpense</code> that has following</p> <ul style="list-style-type: none"><li>a. Properties are <code>ArrayList&lt;ExpenseDetails&gt;</code></li><li>b. write a default constructor only</li><li>c. write a method <code>public void addNewExpense( ExpenseDetails obj )</code> --- this should add the obj to the <code>ArrayList</code> property ONLY if the Expense Date is current MONTH</li><li>d. write a method <code>public void showAll ()</code> this should show all expense details</li><li>e. Write a method <code>public double getTotalExpenditure()</code> this should return the total expense of this month</li><li>f. Write a class <code>User</code> in the same package with main -- add 5 <code>ExpenseDetails</code> objects in the <code>ArrayList</code><br/>Call <code>showAll</code> method<br/>Call <code>getTotalExpenditure ()</code> method and show its result</li></ul> <p style="text-align: right;">done</p> |
| 4  | <p>Write a class <code>study.practice.NotCurrentMonthException</code>, this should be an unchecked exception</p> <p>This exception should be thrown in the <code>addNewExpense()</code> method of <code>MonthlyExpense</code> class when the month of the expense detail is not the current month</p> <p>Catch the exception in the <code>User</code> class and show proper message in catch</p> <p style="text-align: right;">done</p>  |
| 5. | <p>Write a program that plays a guessing game --</p> <p>Generate a random number between 1 to 100 using<br/><code>Java.util.Random obj = new Random(100);</code><br/><code>Int randomNo = obj.nextInt()</code></p> <p style="text-align: right;">done</p> <p>Ask the user to guess the number</p>  |

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|    | <p>give 5 chances, if user guesses in 5 chances then user wins else user loses<br/>On every chance give a hint if the number is greater or less than the entered value</p> <p>Example ( random number generated is 10 )<br/>1st chance user enters 40<br/>Wrong ---hint number is less than 40<br/>2nd chance user enters 7<br/>Wrong---hint number is greater than 7<br/>3rd chance user enters 10<br/>Bingo!!! You won</p> |
| 6  | <p>Write a program that creates a daemon thread to show current date and time after every 2 seconds<br/>Use <code>java.util.Date().toString()</code></p> <p>Make the wait thread sleep for 15 seconds and end ( daemon should end when main ends )</p>   |
| 7  | <p>Write a class that accepts a line from the user , show how many words and letters are in that line ( use <code>split</code>,<code>charAt</code>)</p>  |
| 8  | <p>Read a file and show how many lines are in the file . Print the file in reverse like the <code>tac</code> linux command</p>   |
| 9  | <p>Write a class <code>Product</code> ( properties <code>productname</code>, <code>cost</code>, <code>desc</code> , <code>brand</code> )<br/>Create Array of 5 Products<br/>Serialize each Product in the Array<br/>Write another class and DeSerialize the file having product objects<br/>Show the total of all products after deserialization</p>   |
| 10 | <p>Write a class <code>Library</code> ,<br/>The class has a <code>TreeSet&lt;Book&gt;</code><br/>Write a <code>Book</code> class also with proper properties</p> <p>In the library class write a method<br/><code>showAllBooksInSortedOrderOfName</code><br/><code>showAllBooksInSortedOrderOfAuthor</code></p> <p>Call these methods from User class by creating and populating library object</p>                          |
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