Assessment 3: Practical

Q1. Create a Thread using “Runnable” Interface to display Current Date & Time with interval of 1 second. 10 Marks

Q2. For the given table, create a single entity class with name ‘Department’: 5 Marks

Departments table in HR schema [Table already exists]

Department\_id Numeric

Department\_name varchar

Manager\_id numeric

Location\_id numeric

Q3. Write a JDBC Code to connect with database and fetch department with id “30”. Convert the result in to object of type “Department” created in question #2. 15 Marks

Q4. Create A Java Class with name “SalaryCalculator” with following code: 20 Marks

public class SalaryCalculator{

private static final double TAX\_FREE=0;

public double calcTax(double salary, double taxRate){

double taxableSal = salary – TAX\_FREE;

if(taxableSal > 0)

return taxableSal \* taxRate;

else return 0;

}

}

Now, Write a Junit Test case for above class :

1. Objective: Test salary calculation
2. Assumptions: Salary after Rs 3,00,000 is taxable, no tax on first 3,00,000.
3. Sample Input: Salary = 350000, Tax rate: 0.085
4. Expected Output: Tax = 4250

Write a test case, run and record the result. DO NOT MODIFY “SalaryCalculator” class.

Just mention comment for develop.