**Core Java Coding Assessment**

**Duration: 2 hours**

**Problem Statement:**

**Bank Application**

Design and develop a Payroll processing system

You have to design a Payroll processing system for your company. There are different kinds of Employees – Regular, Contractor, Part-time.

* Regular employees get paid a salary, no matter how many hours they work. They have an annual salary.
* Contractors are paid an hourly rate, but if they work more than 40 hours a week, the excess is paid at ‘time and a half’.
* Managers are regular employees that get paid a salary and 5 % of the salary as bonus.

**Instructions –**

1. Your program should compute the pay for all the employees.
2. For each employee, take user’s input as employee details and the number of hours worked in a given week.
3. Throw custom exception with appropriate error message if the number of hours is input < 0.
4. Display the below details.

* Employee name
* Type of Employee
* Number of hours worked.
* Weekly pay earned.

1. Show the output on the console.
2. Handle appropriate exceptions with appropriate message whenever required.
3. The design should be flexible enough so that in future, more type of employees can be added.