

## Mock Programming Test 2

1. Write 4 classes in Java – Company, Department, Position and Employee.

Description: A Company has a name and many Departments (zero or more). Each Department has a name, location, and many Positions. Each Position has a title and a description and is filled by a single Employee. An Employee has an employeeId, firstname, middleInitial, lastName, birthDate, SSN, and salary.

2. Employees of a company include permanent staff, contractors and managers. Each employee has a name, a salary, and a hire date. For every class, there is a `getSalary()` method. For permanent staff and managers, they have a salary attribute that stores their salary. For contractors, they have additional attributes rate and hours worked. So their salary is calculated by  $(\text{rate} \times \text{hours})$ . Use inheritance and polymorphism to create an application that represents the company's employees as objects, and provides a test class that creates 3 permanent staff, 3 contractors and 2 managers, and then outputs the combined total of all of their salaries.

Start by creating classes

Manager, Perm, Contractor, and Employee

having the following relationship:

