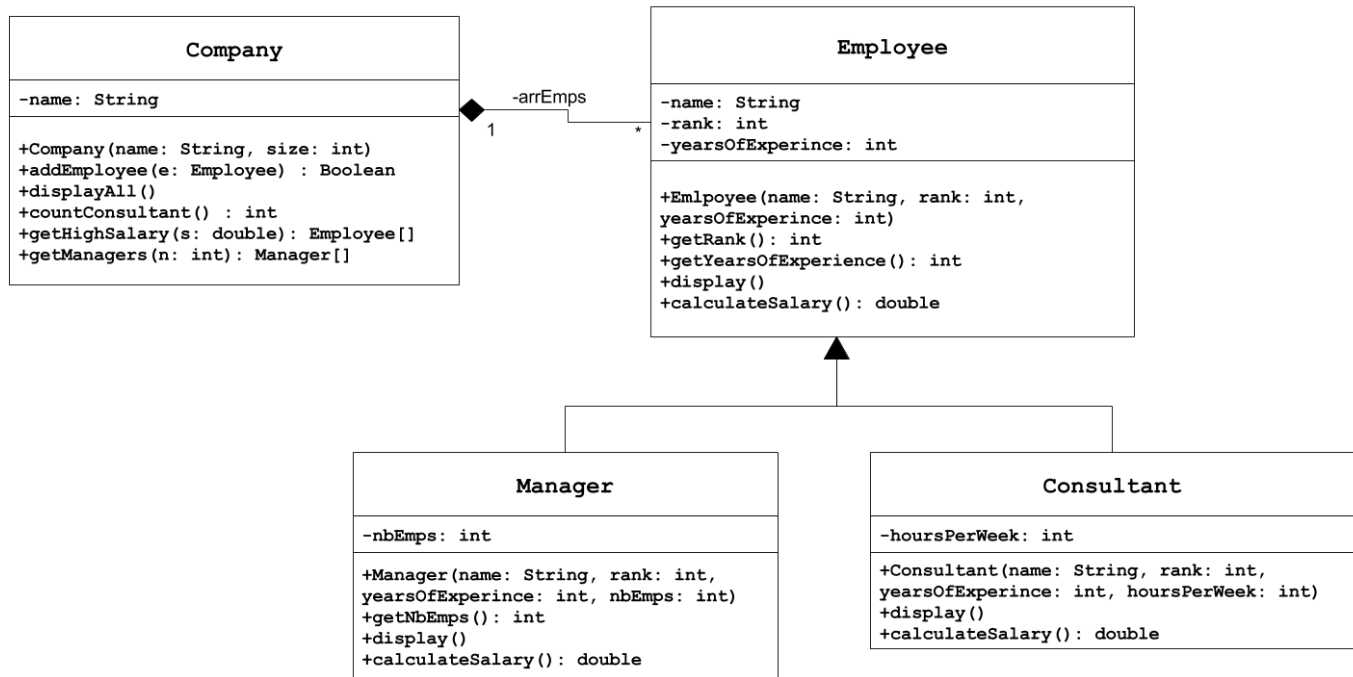


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**Employee class:**

- Attributes:
  - **name**: the name of the employee.
  - **rank**: rank in the company structure (1-15).
  - **yearsOfExperience**: number of years of experience for the employee.
- Methods:
  - **Employee (name: String, rank: int, yearsOfExperience: int)**: constructor
  - **getRank()**: this method returns the rank of employee.
  - **getYearsOfExperience ()**: returns the years of experience of the employee.
  - **display()**: this method display all the attributes of the employee.
  - **calculateSalary()**: this method calculates and return the Salary of the employee as the following:
    - **Employee**: years of experience \* 500 + rank \* 1000
    - **Manager**: years of experience \* 500 + rank \* 1500 + nbOfEmps \* 10
    - **Consultant**: hoursPerWeek \* 1000 + rank \*500

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***Manager*** class:

- Attributes:
  - ***nbEmps***: number of employees managed.
- Methods:
  - ***Manager (name: String, rank: int, yearsOfExperience: int, nbEmps: int)***: constructor
  - ***display()***: this method display all the attributes of the manager.
  - ***getNbEmps()***: this method returns the rank of employee.

***Consultant*** class:

- Attributes:
  - ***hoursPerWeek***: number of hours per week.
- Methods:
  - ***Consultant(name: String, rank: int, yearsOfExperience: int, hoursPerWeek: int)***: constructor
  - ***display()***: this method display all the attributes of the consultant.

***Company*** class:

- Attributes:
  - ***name***: the name of the company.
- Methods:
  - ***Company (name: String, size: int)***: constructor
  - ***addEmployee(Employee e)***: this method adds an employee to the company. An employee can be of type Employee, type Manager or type Consultant.
  - ***displayAll ()***: Display all employees and their attributes along with their salary.
  - ***countConsultant()***: this method returns the number of all Consultants in the company.

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- *getHighSalary(double s)*: this method returns an array all employees with salary greater than s.
- *getManagers(int n)*: returns an array of all managers with nbEmps greater than n.

Write a class with a main method doing the following:

- Create the 3 objects as follows:
  - emp: name = “Ahmed”, years of experience = 7, rank: 8
  - manager: name = “Ali”, years of experience = 12, rank: 12, number of employees: 20
  - consultant: name = “Hamad”, years of experience = 9, rank: 10, hoursPerWeek: 19
- Create the Company ”STC”.
- Add the previously crated objects in the company.
- Display all the employees.
- Display the number of consultants in the company.
- Display all employees with salary greater than SAR20,000.
- Display all Managers with number of employees greater than 10.