

## Constructors- Coding Questions

1. Write a Java class called `Person` with private fields for name and age. Create a constructor that takes in a name and age as parameters and initializes the fields. Also, create a method called `introduce` that prints out a message introducing the person with their name and age.
2. Write a Java class called `Employee` that extends `Person` and adds a private field for salary. Create a constructor that takes in a name, age, and salary as parameters and initializes the fields using the `super` keyword to call the `Person` constructor. Also, create a method called `displaySalary` that prints out the employee's salary.
3. Write a Java class called `Rectangle` with private fields for length and width. Create a constructor that takes in a length and width as parameters and initializes the fields. Also, create a method called `calculateArea` that returns the area of the rectangle (`length * width`).
4. Write a Java class called `Student` with private fields for name, age, and GPA. Create two constructors - one that takes in a name, age, and GPA as parameters and initializes the fields, and another that takes in just a name and age as parameters and sets the GPA to 0.0. Also, create a method called `displayGPA` that prints out the student's GPA.