

Create a class `Employee` with instance variables: `name`, `eid`, and `gross_salary`. Implement:

1. **Constructor:** Initializes `name` and `eid`.
2. **GrossSalary(int basic):** Calculates `gross_salary = basic + HRA + DA` (where HRA is 30% of `basic` and DA is 24% of HRA).
3. **display():** Displays employee details.

Write a main class to test the `Employee` class.

Define a class `Student` with variables: `student_name`, `roll_number`, and `average_marks`. Implement:

1. **Constructor:** Initializes `student_name` and `roll_number`.
2. **calculateAverage(int mark1, int mark2, int mark3):** Computes the average.
3. **display():** Shows student details.

Test the `Student` class with a main class.

Define a class `Loan` with instance variables: `principal`, `rate`, `time`, and `simple_interest`. Implement:

1. **Constructor:** Initializes `principal`, `rate`, and `time` using the `this` keyword.
2. **calculateInterest():** Computes `simple_interest = (principal * rate * time) / 100` and stores it in the `simple_interest` variable and prints the value.

Write a main class to test the `Loan` class.

Create a `Car` class with variables: `model`, `make_year`, and `price_after_discount`. Implement:

1. **Constructor:** Initializes `model` and `make_year`.
2. **calculatePrice(float original_price, float discount_percentage):** Computes the final price.
3. **display():** Shows car details.

Write a main class to test the `Car` class.

Create a class `Book` to represent a book's details. The class should include:

1. **Attributes:**
 - o `title` (String): Title of the book.
 - o `author` (String): Author of the book.
 - o `price` (double): Price of the book.
2. **Constructor:**
 - o Accepts `title` and `author` to initialize the object.
3. **Method setPrice(double price):**
 - o Sets the price of the book.
 - o Call `this.showDetails()` from within this method.
4. **Method showDetails():**
 - o Prints the book title, author, and price.

Write a main class to create a `Book` object, set the book price, and display all the details.