

## Lab\_09: Using Classes and objects.

### Variants:

#### 1. **Employee Class:**

- Create a class **Employee** to represent an employee with attributes such as name, age, and ID, and methods to display information about the employee.

#### 2. **Car Class:**

- Create a class **Car** to represent a car with attributes such as model, color, and year, and methods to print information about the car.

#### 3. **Rectangle Class:**

- Implement a class **Rectangle** to represent a rectangle. Include methods for calculating area and perimeter.

#### 4. **Bank Account Class:**

- Create a class **BankAccount** to represent a bank account with methods for depositing, withdrawing money, and checking the balance.

#### 5. **Student Class:**

- Implement a class **Student** to represent a student with attributes like name, age, and a list of grades. Include a method to calculate the average grade.

#### 6. **Triangle Class:**

- Create a class **Triangle** to represent a triangle with attributes for side lengths and a method to determine the type of triangle (equilateral, isosceles, or scalene).

#### 7. **Book Class:**

- Implement a class **Book** to represent a book with attributes such as title, author, and publication year.

#### 8. **Circle Class:**

- Create a class **Circle** to represent a circle with a radius attribute and methods for calculating area and circumference.

#### 9. **Task Class:**

- Implement a class **Task** to represent a task with attributes like description and completion status (done/not done).

#### 10. **Computer Class:**

- Create a class **Computer** to represent a computer with attributes such as model, processor, and memory.

#### 11. **House Class:**

- Implement a class **House** to represent a house with attributes like the number of rooms, area, and address.

#### 12. **Product Class:**

- Create a class **Product** to represent a product in a store with attributes like name, price, and quantity in stock.

#### 13. **Address Class:**

- Implement a class **Address** to represent an address with attributes like street, city, postal code, and country.

#### 14. **Job Class:**

- Create a class **Job** to represent a job with attributes such as title, salary, and requirements for applicants.

#### 15. **Team Class:**

- Implement a class **Team** to represent a sports team with attributes like name and a list of players.
16. **Planet Class:**
- Create a class **Planet** to represent a planet with attributes like name, radius, and distance from the Sun.
17. **Movie Class:**
- Implement a class **Movie** to represent a movie with attributes like title, director, and release year.
18. **Luggage Class:**
- Create a class **Luggage** to represent luggage with attributes like weight, size, and type (carry-on, checked).
19. **Chair Class:**
- Implement a class **Chair** to represent a chair with attributes like color, material, and comfort level.
20. **Store Class:**
- Create a class **Store** to represent a store with attributes like name, address, and a list of products.