

- 1.** Write a Scala program that creates a class called Person with properties like name, age and country. Implement methods to get and set properties.
- 2.** Write a Scala program that creates a subclass Student that extends the Person class. Add a property called grade and implement methods to get and set it.
- 3.** Write a Scala program that creates an object MathUtils with a static method factorial that calculates the factorial of a given number.
- 4.** Write a Scala program that creates an abstract class Shape with an abstract method area. Implement subclasses Rectangle and Circle that override the area method.
- 5.** Write a Scala program that creates a class BankAccount with properties accountNumber and balance. Implement methods to deposit and withdraw money from the account.
- 6.** Write a Scala program that creates a class Employee with properties like name, age, and designation. Implement a method to display employee details.
- 7.** Write a Scala program that creates a class Car with properties like make, model, and year. Implement a method to display car information.
- 8.** Write a Scala program that creates a class Animal with properties name and sound. Implement a method makeSound that prints the animal's sound.
- 9.** Write a Scala program that creates a class Triangle with properties side1, side2, and side3. Implement a method isEquilateral to check if the triangle is equilateral.
- 10.** Write a Scala program that creates a trait Resizable with a method resize that changes the size of an object. Implement a class Rectangle that extends the Resizable trait.