## **Python Class/Object**

- 1. Create a class called "Person" with a constructor that initializes the person's name and age. Add a method to print the person's name and age.
- 2. Create a class called "Rectangle" with a constructor that initializes the rectangle's length and width. Add methods to calculate the rectangle's area and perimeter.
- 3. Create a class called "Circle" with a constructor that initializes the circle's radius. Add methods to calculate the circle's area and circumference.
- 4. Create a class called "Animal" with a constructor that initializes the animal's name and age. Add a method to print the animal's name and age.
- 5. Create a class called "Student" with a constructor that initializes the student's name, age, and grade. Add a method to print the student's name, age, and grade.
- 6. Create a class called "Car" with a constructor that initializes the car's make, model, and year. Add a method to print the car's make, model, and year.
- 7. Create a class called "Book" with a constructor that initializes the book's title, author, and year published. Add a method to print the book's title, author, and year published.
- 8. Create a class called "BankAccount" with a constructor that initializes the account holder's name and initial balance. Add methods to deposit money, withdraw money, and print the current balance.
- 9. Create a class called "Rectangle" with a constructor that initializes the rectangle's length and width. Add a method to check if the rectangle is a square.
- 10. Create a class called "Employee" with a constructor that initializes the employee's name, salary, and job title. Add a method to print the employee's name, salary, and job title.
- 11. Create a class called "Point" with a constructor that initializes the point's x and y coordinates. Add a method to calculate the distance between two points.
- 12. Create a class called "Triangle" with a constructor that initializes the triangle's base and height. Add a method to calculate the triangle's area.
- 13. Create a class called "Person" with a constructor that initializes the person's name and age. Add methods to change the person's name and age.
- 14. Create a class called "Shape" with a constructor that initializes the shape's color. Add a method to print the shape's color.
- 15. Create a class called "BankAccount" with a constructor that initializes the account holder's name and initial balance. Add methods to deposit money, withdraw money, and check if the account is overdrawn.
- 16. Create a class called "Dog" with a constructor that initializes the dog's name, breed, and age. Add a method to print the dog's name, breed, and age.
- 17. Create a class called "Square" that extends the Rectangle class. Add a constructor that initializes the square's side length.
- 18. Create a class called "Time" with a constructor that initializes the time in hours, minutes, and seconds. Add a method to print the time in 24-hour format.
- Create a class called "Circle" that extends the Shape class. Add a constructor that initializes the circle's radius.
- Create a class called "BankAccount" with a constructor that initializes the account holder's name and initial balance. Add methods to transfer money to another account and print the account's transaction history.