

Problem 1: Calculator

Description: Create a Calculator class that can perform addition operations on different types and numbers of parameters.

Requirements:

1. Implement a method `add(int a, int b)` to add two integers.
2. Implement a method `add(double a, double b)` to add two double values.
3. Implement a method `add(int a, int b, int c)` to add three integers.
4. Implement a method `add(int[] numbers)` to add an array of integers.

Problem 2: Area Calculation

Description: Create a class `AreaCalculator` that can calculate the area of different shapes using method overloading.

Requirements:

1. Implement a method `calculateArea(double radius)` to calculate the area of a circle.
2. Implement a method `calculateArea(double length, double breadth)` to calculate the area of a rectangle.
3. Implement a method `calculateArea(double base, double height, boolean isTriangle)` to calculate the area of a triangle.

Problem 3: String Manipulator

Description: Create a `StringManipulator` class that can perform various string operations using method overloading.

Requirements:

1. Implement a method `concatenate(String a, String b)` to concatenate two strings.
2. Implement a method `concatenate(String a, String b, String c)` to concatenate three strings.
3. Implement a method `concatenate(String[] strings)` to concatenate an array of strings.

Problem 4: Volume Calculation

Description: Create a `VolumeCalculator` class that can calculate the volume of different 3D shapes using method overloading.

Requirements:

1. Implement a method `calculateVolume(double radius)` to calculate the volume of a sphere.
2. Implement a method `calculateVolume(double radius, double height)` to calculate the volume of a cylinder.

3. Implement a method `calculateVolume(double length, double breadth, double height)` to calculate the volume of a cuboid.

Problem 5: Printer

Description: Create a `Printer` class that can print different types of data using method overloading.

Requirements:

1. Implement a method `print(int number)` to print an integer.
2. Implement a method `print(double number)` to print a double.
3. Implement a method `print(String message)` to print a string.
4. Implement a method `print(int[] numbers)` to print an array of integers.



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