Code Documentation

# Description

The code defines a simple Java program that prints out a welcome message and then displays information about a list of publishers using the `Publisher` class.

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## 1. Introduction

This Java program demonstrates how to create a `Main` class with a `main` method that performs the following tasks:  
 1. Prints a welcome message  
 2. Creates an array of `Publisher` objects  
 3. Uses the `forEach` method to print out the details of each publisher

## 2. Requirements

To run this code, you will need to have Java installed on your system. This code uses no external libraries beyond the standard Java library.

## 3. Usage Instructions

To run this code, follow these steps:  
 1. Compile the Java source file using the `javac` command (not included in this code snippet)  
 2. Run the compiled `.class` file using the `java` command  
 3. The program will print out the welcome message followed by the details of each publisher

## 4. Code Comments

The code includes the following key sections:  
 1. Variable declarations: The `welcomeMessage` variable is declared as a string literal, and the `publishers` variable is created using the `List.of()` method  
 2. Printing the welcome message: The `%s` placeholder is used in the `System.out.printf()` method to insert the value of `welcomeMessage` into the output  
 3. Creating the `publishers` list: Each `Publisher` object is created with its respective ID, name, email address, and phone number (or null if not applicable)

## 5. Examples

Input/Output Example:  
```  
Welcome to Cs425 City Library  
Publisher [ID=101, Name=McGraw-Hill, Email=sales@mcgraw.com, Phone=(null), Publisher]  
Publisher [ID=102, Name=Apress, Email=sales@apress.com, Phone=(123) 456-7890)  
Publisher [ID=103, Name=Penguin-RandomHouse, Email=null, Phone=null)  
Publisher [ID=104, Name=Addison-Wesley, Email=null, Phone=null)  
```

## 6. Configuration

There are no configuration options available for this code. The values for the `welcomeMessage`, `publishers` list, and other variables are hardcoded within the `Main` class.

## 7. Troubleshoot

Common Issues:  
 1. If there is an error compiling the code, ensure that Java is properly installed on your system.  
 2. If there is an issue printing the publisher details, check that the `Publishers` list is populated correctly.

## 8. Limitations

This code only works with pre-defined `Publisher` objects and does not support dynamic data input or database connections.

## 9. Conclusions

This code provides a basic example of creating a `Main` class with a `main` method that prints a welcome message and displays publisher information. While it lacks advanced features, it demonstrates fundamental concepts such as variable declaration, printing, and collection iteration.

## 10. Usage Examples

Practical Use Cases:  
 \* Using this code as a starting point for more complex library management systems  
 \* Modifying the `Publisher` class to include additional fields or methods  
 \* Extending this code to connect to a real database for retrieving and displaying library data