Task 1: Basic Syntax and Understanding

1.1. Write a PHP script to display the current date and time in the following format: "Day-Month-Year Hours:Minutes:Seconds".

1.2. Explain the differences between "echo" and "print" in PHP.

Task 2: Strings and Arrays

2.1. Write a PHP function that checks if a string is a palindrome or not.

2.2. Write a PHP script that removes duplicate elements from an array.

****Task 3: File Handling and Exceptions****

3.1. Write a PHP script to read a file, count the number of lines in it, and display the count.

3.2. Explain how you would handle exceptions in PHP. Provide an example.

****Task 4: Database Interaction****

4.1. Write a PHP script using PDO to connect to a MySQL database and execute a SELECT query.

4.2. How would you prevent SQL injection in PHP? Provide an example.

Task 5: PHP OOP Concepts

5.1. Create a Library Book Management System

Instructions:

Create a simple Library Book Management System in PHP using object-oriented programming principles. Your system should consist of a Book class and a Library class.

Book Class:

Create a Book class with the following attributes and methods:

- Attributes:
  - Title
  - Author
  - ISBN (International Standard Book Number)
  - Availability (boolean indicating whether the book is available for borrowing)

- Methods:
  - __construct($title, $author, $isbn): A constructor method to initialize the book's attributes. By default, a book should be marked as available.
  - getTitle(): Returns the book's title.
  - getAuthor(): Returns the book's author.
  - getISBN(): Returns the book's ISBN.
  - isAvailable(): Returns true if the book is available, false otherwise.
  - borrowBook(): Sets the book's availability to false when it's borrowed.
  - returnBook(): Sets the book's availability to true when it's returned.

Library Class:

Create a Library class with the following attributes and methods:

- Attributes:
  - Name
  - Books (an array to store Book objects)

- Methods:
  - __construct($name): A constructor method to initialize the library's name.
  - addBook($book): Accepts a Book object and adds it to the library's collection of books.
  - findAvailableBooks(): Returns an array of all available books in the library.
  - findBookByISBN($isbn): Takes an ISBN as an argument and returns the corresponding book object if it exists in the library, or null if not found.
  - borrowBook($isbn): Accepts an ISBN, finds the book, and borrows it (set its availability to false).
  - returnBook($isbn): Accepts an ISBN, finds the book, and returns it (set its availability to true).

Instructions for the Assessment:

- Create the Book class as described above.
- Create the Library class as described above.
- Write a sample script that demonstrates the functionality of your Library Book Management System. This script should:
  - Create instances of the Book class.
  - Create an instance of the Library class.
  - Add books to the library.
  - Borrow and return books.
  - Display available books in the library.

Ensure that your code is well-documented, follows best practices for OOP in PHP, and handles potential errors gracefully.