

Lab program 8b

Develop a PHP program (with HTML/CSS) to sort the student records which are stored in the database using selection sort.

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Student Record Sorter</title>
<style>
body {
font-family: Arial, sans-serif;
line-height: 1.6;
margin: 0;
padding: 20px;
background-color: #f4f4f4;
}
.container {
max-width: 800px;
margin: auto;
background: white;
padding: 20px;
border-radius: 5px;
box-shadow: 0 0 10px rgba(0,0,0,0.1);
}
h1 {
color: #333;
text-align: center;
}
table {
width: 100%;
border-collapse: collapse;
margin-top: 20px;
}
th, td {
padding: 10px;
border: 1px solid #ddd;
text-align: left;
}
th {
background-color: #f2f2f2;
```

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}
</style>
</head>
<body>
<div class="container">
<h1>Student Records</h1>

<?php
// Database connection details
$host = 'localhost';
$dbname = 'students_records';
$username = 'root';
$password = '';
try {
    $pdo = new PDO("mysql:host=$host;dbname=$dbname", $username, $password);
    $pdo->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
    // Fetch student records
    $stmt = $pdo->query("SELECT * FROM students");
    $students = $stmt->fetchAll(PDO::FETCH_ASSOC);
    echo "Unsorted list";
    echo "<table>";
    echo "<tr><th>ID</th><th>Name</th><th>CGPA</th></tr>";
    foreach ($students as $student) {
        echo "<tr>";
        echo "<td>" . $student['id'] . "</td>";
        echo "<td>" . $student['name'] . "</td>";
        echo "<td>" . $student['cgpa'] . "</td>";
        echo "</tr>";
    }
    echo "</table>";
    // Selection sort function
    function selectionSort(&$arr, $n) {
        for ($i = 0; $i < $n - 1; $i++) {

            $min_idx = $i;
            for ($j = $i + 1; $j < $n; $j++) {
                if ($arr[$j]['cgpa'] < $arr[$min_idx]['cgpa']) {
                    $min_idx = $j;
                }
            }
            if ($min_idx != $i) {
                $temp = $arr[$i];
                $arr[$i] = $arr[$min_idx];
                $arr[$min_idx] = $temp;
            }
        }
    }
}

```

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}  
}  
}  
// Sort students by GPA  
selectionSort($students, count($students));  
// Display sorted student records  
echo "Sorted list";  
echo "<table>";  
echo "<tr><th>ID</th><th>Name</th><th>CGPA</th></tr>";  
foreach ($students as $student) {  
    echo "<tr>";  
    echo "<td>" . $student['id']. "</td>";  
    echo "<td>" . $student['name']. "</td>";  
    echo "<td>" . $student['cgpa']. "</td>";  
    echo "</tr>";  
}  
echo "</table>";  
} catch(PDOException $e) {  
    echo "Connection failed: " . $e->getMessage();  
}  
?>  
</div>  
</body>  
</html>
```