Problem 1:

We'll need to connect to our database, run the required SQL queries, and then handle the results in order to use PHP and MySQL to solve this problem. This PHP script may be used to determine the top 5 investors and their total investments, assuming you have a MySQL database with a table named transactions that has the required fields (InvestorID, SyndicateID, TransactionAmount, and TransactionDate):

```php
<?php

    $host = "your_host";

    $username = "your_username";

    $password = "your_password";

    $database = "your_database";


    // Establish a connection to the MySQL database

    $mysqli = new mysqli($host, $username, $password, $database);


    // Verify any connectivity issues

    if ($mysqli->connect_error) {

        die("Connection failed: " . $mysqli->connect_error);

    }


    // SQL query to total transaction amounts and the number of distinct syndicates for each investor

    $query = "

        SELECT InvestorID, COUNT(DISTINCT SyndicateID) AS UniqueSyndicates, SUM(TransactionAmount) AS TotalInvestment

        FROM transactions

        GROUP BY InvestorID

        ORDER BY UniqueSyndicates DESC, TotalInvestment DESC

        LIMIT 5

    ";
```

```php
$result = $mysqli->query($query);


if ($result) {
    echo " The Top 5 Investors in Terms of Unique Syndicates:\n";
    $rank = 1;


    while ($row = $result->fetch_assoc()) {
        $investorID = $row['InvestorID'];
        $uniqueSyndicates = $row['UniqueSyndicates'];
        $totalInvestment = $row['TotalInvestment'];


        echo "$rank. Investor ID: $investorID, Unique Syndicates: $uniqueSyndicates, Total Investment: $totalInvestment\n";
        $rank++;
    }


    // Close the result set
    $result->close();
} else {
    echo "Error: " . $mysqli->error;
}


// Close the connection to the database.
$mysqli->close();
?>
```

Please ensure that the variables "your_host", "your_username", "your_password", and "your_database" refer to the real information of your database connection. After making a database connection and running the SQL query, this script lists the top 5 investors according to the total amount they have invested in as well as the number of distinct syndicates they have invested in.

Below is another Raw SQL Script Solution:

```sql
SELECT
        InvestorID,
        COUNT(DISTINCT SyndicateID) AS syndicate_count,
        SUM(amount) AS total_investment
        FROM
          transactions
        GROUP BY
          InvestorID
        ORDER BY
          syndicate_count DESC
        LIMIT 5;
```

This MySQL query states:

I first choose the 'InvestorID', then I compute the 'total_investment', which is the sum of the distinct 'SyndicateID' counts. To group the results by 'InvestorID', I employ the GROUP BY clause. The results are arranged in decreasing order according to 'syndicate_count' using the ORDER BY clause. Lastly, I limit the result set to the top 5 rows using the **LIMIT** clause.