```
<!DOCTYPE html>
<html>
<head>
	<meta name = "viewport" content = "width=device-width, initial-scale = 1">
	<style>

	header {
		padding: 15px;
		border-style: solid;
		border-color: black;
		background-image:linear-gradient(red,white);
		font-color: white;
		font-size: 15px;
		font-family: monospace;
		opacity: 0.8;
		text-align: center;
	}
	header::after {
		padding: 15px;
		border-style: solid;
		border-color: black;
		background-image:linear-gradient;
		content = "";
		clear: both;
		display: table;
		opacity: 0.8;
		font-family: monospace;
		font-color: white;
	}
```

```
body {
	font-family: monospace;
	margin: 0;
	border-style: black;
	border-color: black;
}
section {
	content = "";
	display: table;
	float: left;
	clear: both;
	width: 100%;
	font-size: 15px;
	border-style: solid;
	border-color: black;
}
table {
	border-style: solid;
	border-color: black;
	width: 80%;
}
th {
	border-style: solid;
	border-color: black;
}
footer {
	padding: 15px;
	color: white;
	border-style: solid;
```

```
                border-color: black;
        }
</style>
<header>
        <h3>Edgar Test Lab Values</h3>
</header>
</head>
<body>
        <?php

        define("NOAUTH",true);
        require_once "/var/www/html/redcap/redcap_conntect.php";

        //The following queries calculate the average value for field names

        //takes the average value for PACO2 levels within the database and ouputs it on a table
        $avg_paco2_query = "SELECT avg(value) AS AVGPACO2 FROM informatics.redcap_data WHERE
field_name = 'paco2_lvl'";
        $avg_paco2_result = mysqli_query($conn,$avg_paco2_query);
        while ($avg_paco2_row = mysqli_fetch_assoc($avg_paco2_result))
        {
                $avg_paco2_output = $avg_paco2_row['AVGPACO2'];
        }

        //takes hte average value for PAO2 levles within the datbase and outputs it on a table
        $avg_pao2_query = "SELECT avg(value) AS AVGPAO2 FROM informatics.redcap_data WHERE
field_name = 'pao2_lv'";
        $avg_pao2_result = mysqli_query($conn,$avg_pao2_query);
        while ($avg_pao2_row = mysqli_fetch_assoc($avg_pao2_result))
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```
{
        $avg_pao2_output = $avg_pao2_row['AVGPAO2'];
}

//takes the average value for serum bicarbonate levels within the database and outputs it on a table
$avg_serumbicarb_query = "SELECT avg(value) AS AVGSERUMBI FROM informatics.redcap_data WHERE field_name = serum_bicarbonate_level'";
$avg_serumbicarb_result = mysqli_query($conn, $avg_serumbicarb_query);
while ($avg_serumbicarb_row = mysqli_fetch_assoc($avg_serumbicarb_result))
{
        $avg_serumbicarb_output = $avg_serumbicarb_row['AVGSERUMBI'];
}

//takes the average value for blood urea nitrogen within the database and outputs it on a table
$avg_bun_query = "SELECT avg(value) AS AVGBUN FROM informatics.redcap_data WHERE field_name = 'blood_urea_nitrogen_lv'";
$avg_bun_result = mysqli_query($conn, $avg_bun_query);
while ($avg_bun_row = mysqli_fetch_assoc($avg_bun_result))
{
        $avg_bun_output = $avg_bun_row['AVGBUN'];
}

//takes the average value for serum glucose within the database and outputs it on a table
$avg_serumglucose_query = "SELECT max(value) AS AVGSERUMGLUCOSE FROM informatics.redcap_data WHERE field_name = 'serum_glucose'";
$avg_serumglucose_result = mysqli_query($conn, $avg_serumglucose_query);
while ($avg_serumglucose_row = mysqli_fetch_assoc($avg_serumglucose_result))
{
        $avg_serumglucose_output = $avg_serumglucose_row['AVGSERUMGLUCOSE'];
```

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}

//takes the average value for hermatocrit within the database and outputs it on a table
$avg_hermatocrit_query = "SELECT avg(value) AS AVGHERM FROM informatics.redcap_data WHERE field_name = 'hermatocrit_lv'";
$avg_hermatocrit_result = mysqli_query($conn, $avg_hermatocrit_query);
while ($avg_bun_row = mysqli_fetch_assoc($avg_hermatocrit_result))
{
	$avg_hermatocrit_output = $avg_hermatocrit_row['AVGHERM'];
}

//takes the average value for serum sodium within the database and outputs it on a table
$avg_serumsodium_query = "SELECT avg(value) AS AVGSERUMSODIUM FROM informatics.redcap_data WHERE field_name = 'serum_sodium_lv'";
$avg_serumsodium_result = mysqli_query($conn, $avg_serumsodium_query);
while ($avg_sodium_row = mysqli_fetch_assoc($avg_serumsodium_result))
{
	$avg_serumsodium_output = $avg_serumsodium_row['AVGSERUMSODIUM'];
}

//takes the average value for plueral effusion within the database and outputs it on a table
$avg_plueraleff_query = "SELECT avg(value) AS AVGPLUERALEFF FROM informatics.redcap_data WHERE field_name = 'plueral_effusion'";
$avg_plueraleff_result = mysqli_query($conn,)
$min_paco2_query = "SELECT min(value) AS minPACO2 FROM informatics.redcap_data WHERE field_name = 'paco2_lvl'";
$min_paco2_result = mysqli_query($conn,$min_paco2_query);
while ($min_paco2_row = mysqli_fetch_assoc($min_paco2_result))
{
	$min_paco2_output = $min_paco2_row['MINPACO2'];
```

```
}

//The following queries calculate the minimum value for field names

//takes the minuimum value for PACO2 levels within the database and outputs it on a table
$min_paco2_query = "SELECT min(value) AS MINPACO2 FROM informatics.redcap_data WHERE field_name = 'paco2_lv'";
$min_paco2_result = mysqli_query($conn, $min_paco2_query);
while ($min_paco2_row = mysqli_fetch_assoc($min_paco2_result))
{
	$min_paco2_output = $min_paco2_row['MINPACO2'];
}

//takes the minimum value for PAO2 levels within the database and outputs it on a table
$min_pao2_query = "SELECT min(value) AS MINPAO2 FROM informatics.redcap_data WHERE field_name = 'pao2_lv'";
$min_paco2_result = mysqli_query($conn,$min_pao2_query);
while ($min_pao2_row = mysqli_fetch_assoc($min_pao2_result))
{
	$min_pao2_output = $min_pao2_row['MINPAO2'];
}

//takes hte minumum value for serum bicarbonate levels within the database and outputs it on a table
$min_serumbicarb_query = "SELECT min(value) AS MINSERUMBI FROM informatics.redcap_data WHERE field_name = serum_bicarbonate_level'";
$min_serumbicarb_result = mysqli_query($conn, $min_serumbicarb_query);
while ($min_serumbicarb_row = mysqli_fetch_assoc($min_serumbicarb_result))
{
	$min_serumbicarb_output = $min_serumbicarb_row['MINSERUMBI'];
```

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}

//takes the minimum value for blood urea nitrogen within the database and outputs it on a table
$min_bun_query = "SELECT min(value) AS MINBUN FROM informatics.redcap_data WHERE field_name = 'blood_urea_nitrogen_lv'";
$min_bun_result = mysqli_query($conn, $min_bun_query);
while ($min_bun_row = mysqli_fetch_assoc($min_bun_result))
{
	$min_bun_output = $min_bun_row['MINBUN'];
}

//takes the minimum value for serum glucose within the database and outputs it on a table
$min_serumglucose_query = "SELECT min(value) AS MINSERUMGLUCOSE FROM informatics.redcap_data WHERE field_name = 'serum_glucose'";
$min_serumglucose_result = mysqli_query($conn, $min_serumglucose_query);
while ($min_serumglucose_row = mysqli_fetch_assoc($min_serumglucose_result))
{
	$min_serumglucose_output = $min_serumglucose_row['MINSERUMGLUCOSE'];
}

//tales the minimum value for hermatocrit within the database and outputs it on a table
$min_hermatocrit_query = "SELECT min(value) AS MINHERM FROM informatics.redcap_data WHERE field_name = 'hermatocrit_lv'";
$min_hermatocrit_result = mysqli_query($conn, $min_hermatocrit_query);
while ($min_bun_row = mysqli_fetch_assoc($min_hermatocrit_result))
{
	$min_hermatocrit_output = $min_hermatocrit_row['MINHERM'];
}
```

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	//takes the minimum value for serum sodium within the database and outputs it on a table
	$min_serumsodium_query = "SELECT min(value) AS MINSERUMSODIUM FROM informatics.redcap_data WHERE field_name = 'serum_sodium_lv'";
	$min_serumsodium_result = mysqli_query($conn, $min_serumsodium_query);
	while ($min_sodium_row = mysqli_fetch_assoc($min_serumsodium_result))
	{
		$min_serumsodium_output = $min_serumsodium_row['MINSERUMSODIUM'];
	}

	//takes the maximum value for PACO2 levels within the database and outputs it on a table
	$max_paco2_query = "SELECT max(value) AS MAXPACO2 FROM informatics.redcap_data WHERE field_name = 'paco2_lvl'";
	$max_paco2_result = mysqli_query($conn,$max_paco2_query);
	while ($max_paco2_row = mysqli_fetch_assoc($max_paco2_result))
	{
		$max_paco2_output = $max_paco2_row['MAXPACO2'];
	}

	//takes the maximum value for PAO2 levels within the database and outputs it on a table
	$max_pao2_query = "SELECT max(value) AS MAXPAO2 FROM informatics.redcap_data WHERE field_name = 'pao2_lv'";
	$max_paco2_result = mysqli_query($conn,$max_pao2_query);
	while ($max_pao2_row = mysqli_fetch_assoc($max_pao2_result))
	{
		$max_pao2_output = $max_pao2_row['MAXPAO2'];
	}

	//takes the maximum value for serum bicarbonate within the database and outputs it on a table
	$max_serumbicarb_query = "SELECT max(value) AS MAXSERUMBI FROM informatics.redcap_data WHERE field_name = serum_bicarbonate_level'";
```

```
$max_serumbicarb_result = mysqli_query($conn, $max_serumbicarb_query);

while ($max_serumbicarb_row = mysqli_fetch_assoc($max_serumbicarb_result))

{

	$max_serumbicarb_output = $max_serumbicarb_row['MAXSERUMBI'];

}


//takes the maximum value for blood urea nitrogen within the database and outputs it on a table

$max_bun_query = "SELECT max(value) AS MAXBUN FROM informatics.redcap_data WHERE field_name = 'blood_urea_nitrogen_lv'";

$max_bun_result = mysqli_query($conn, $max_bun_query);

while ($max_bun_row = mysqli_fetch_assoc($max_bun_result))

{

	$max_bun_output = $max_bun_row['MAXBUN'];

}


//takes the maximum value for serum glucose wihtin the database and outputs it on a table

$max_serumglucose_query = "SELECT max(value) AS MAXSERUMGLUCOSE FROM informatics.redcap_date WHERE field_name = 'serum_glucose'";

$max_serumglucose_result = mysqli_query($conn, $max_serumglucose_query);

while ($max_serumglucose_row = mysqli_fetch_assoc($max_serumglucose_result))

{

	$max_serumglucose_output = $max_serumglucose_row['MAXSERUMGLUCOSE'];

}


//takes the maximum value for hermatocrit

$max_hermatocrit_query = "SELECT max(value) AS MAXHERM FROM informatics.redcap_data WHERE field_name = 'hermatocrit_lv'";

$max_hermatocrit_result = mysqli_query($conn, $max_hermatocrit_query);

while ($max_bun_row = mysqli_fetch_assoc($max_hermatocrit_result))
```

```
{
	$max_hermatocrit_output = $max_hermatocrit_row['MAXHERM'];
}

//takes the maximum value for serum sodium within the database and outputs it on a table
$max_serumsodium_query = "SELECT max(value) AS MAXSERUMSODIUM FROM informatics.redcap_data WHERE field_name = 'serum_sodium_lv'";
$max_serumsodium_result = mysqli_query($conn, $max_serumsodium_query);
while ($max_sodium_row = mysqli_fetch_assoc($max_serumsodium_result))
{
	$max_serumsodium_output = $max_serumsodium_row['MAXSERUMSODIUM'];
}
?>
<p>The tables below will show the average results of the lab tests.</p>
<br><br>
<table>
	<tr>
		<th>Average PaCO2 Levels</th>
		<th>Average PaO2 Levels</th>
		<th>Average Serum Bicarbonate Levels</th>
		<th>Average Blood Urea Nitrogen</th>
		<th>Average Serum Glucose</th>
		<th>Average Hermatocrit</th>
		<th>Average Serum Sodium</th>
		<th>Average Plueral Effusion</th>
	</tr>
	<tr>
		<th><?php echo $avg_paco2_output;?></th>
		<th><?php echo $avg_pao2_output;?></th>
```

```
                <th><?php echo $avg_serumbicarb_output;?></th>
                <th><?php echo $avg_bun_output;?></th>
                <th><?php echo $avg_serumglucose_output;?></th>
                <th><?php echo $avg_hermatocrit_output;?></th>
                <th><?php echo $avg_serumsodium_output;?></th>
                <th><?php echo $avg_plueraleff_output;?></th>
        </tr>
</table>
<br><br>
<p>The table below shows the minimum results for lab test results.</p>
<table>
        <tr>
                <th>Minimum PaCO2 Levels</th>
                <th>Minimum PaO2 Levels</th>
                <th>Minimum Serum Bicarbonate Levels</th>
                <th>Minimum Blood Urea Nitrogen</th>
                <th>Minimum Serum Glucose</th>
                <th>Minimum Hermatocrit</th>
                <th>Minimum Serum Sodium</th>
                <th>Minimum Plueral Effusion</th>
        </tr>
        <tr>
                <th><?php echo $min_paco2_output;?></th>
                <th><?php echo $min_pao2_output;?></th>
                <th><?php echo $min_serumbicarb_output;?></th>
                <th><?php echo $min_bun_output;?></th>
                <th><?php echo $min_serumglucose_output;?></th>
                <th><?php echo $min_hermatocrit_output;?></th>
                <th><?php echo $min_serumsodium_output;?></th>
```

```
                    <th><?php echo $min_plueraleff_output;?></th>
                </tr>
            </table>
            <br><br>
            <p>The table below shows the maximum results for lab test results.</p>
            <table>
                <tr>
                    <th>Maximum PaCO2 Levels</th>
                    <th>Maximum PaO2 Levels</th>
                    <th>Maximum Serum Bicarbonate Levels</th>
                    <th>Maximum Blood Urea Nitrogen</th>
                    <th>Maximum Serum Glucose</th>
                    <th>Maximum Hermatocrit</th>
                    <th>Maximum Serum Sodium</th>
                    <th>Maximum Plueral Effusion</th>
                </tr>
            </table>
    </body>
    </html>
```