1. Write the line of PHP code that will allow you to connect to a database.

$databaseConnection = @mysqli\_connect(DB\_HOST, DB\_USER, DB\_PASSWORD, DB\_NAME) OR die('Could not connect to MySQL: ' . mysqli\_connect\_error());

1. Write the line of PHP code that will set the character set of the database connection in question 1 to 8 bit unicode.

mysqli\_set\_charset($databaseConnection, 'utf8');

1. Write the line of PHP code that will take the database connection as an argument and the query itself in the second argument, and set that equal to the result.  Assume that the result variable is $r and the query variable is $q.

$r = @mysqli\_query($databaseConnection, $q);

1. What condition could you apply to $r to verify that the query works?

*An if() statement could be used to verify the success of a query by supplying $r as an argument to the if condition, which will be interpreted as a false condition if the query was unsuccessful.*

1. If the query did not successfully run, then what function would handle the error?

*The mysqli\_error() function can be used to handle any errors caused by an errant query.*

1. Write the PHP code that closes the connection to the database.

mysqli\_close($databaseConnection);

1. What is a fetch array? What does it do?

*A fetch array takes the results of a SELECT query that is passed to it and returns an array with each row of the query as an index of the array.*

1. Define the mysqli\_fetch\_array( ) constants in table 9.1on pg 284.

*MYSQLI\_ASSOC – Allows the results of the query array to be referred to by column name.*

*MYSQLI\_NUM – Allows the results of the query to be referenced by their index.*

*MYSQLI\_BOTH – The fetch array’s default behavior which arranges the results by both name and index.*

1. What are the 3 broad security issues with respect to PHP?

*The three broad security issues with PHP are:*

* 1. *Protecting information regarding how your database is accessed.*
  2. *Not revealing too much information about the structure or contents of the database.*
  3. *Utilizing caution regarding which queries are used against the database and sanitizing any user-supplied inputs.*

1. Write the line of PHP code that will return the number of the rows retrieved by a SELECT query?

$count = mysqli\_num\_rows($queryResult);