# Section – A: Theory Questions

1. **How to find the length of the string in SQL? [Hint: CHAR_LENGTH, Character_Length]**
   To find the length of a string in SQL, we can use the CHAR_LENGTH or CHARACTER_LENGTH function.

2. **Explain how the CONCAT function is utilized to merge two or more strings in SQL.**
   The CONCAT function in SQL can be used to merge two or more strings by concatenating them. The syntax is "CONCAT(string1, string2, ...)".

3. **What is the main difference between CONCAT and CONCAT_WS functions in SQL?**
   The main difference between the CONCAT and CONCAT_WS functions in SQL is that CONCAT_WS has an additional separator parameter, which is placed between each string being concatenated. The syntax is "CONCAT_WS(separator, string1, string2, ...)".

4. **Explain how to convert a string to uppercase or lowercase in SQL.** [Hint: UCase, LCase, Upper, Lower]
   To convert a string to uppercase or lowercase in SQL, we can use the UCASE or LCASE function, or the UPPER or LOWER function, depending on the database management system being used.

5. **What is the role of the LEFT, RIGHT, and MID functions in SQL and how are they used?**
   The LEFT, RIGHT, and MID functions in SQL are used to extract a portion of a string. LEFT returns the leftmost n characters of a string, RIGHT returns the rightmost n characters of a string, and MID returns a substring of a string, starting from a specified position and for a specified number of characters.

6. **which function is used to determine the location of a substring in a string in SQL?** [Hint: Position, Instr, Locate]
   The POSITION, INSTR, or LOCATE function can be used to determine the location of a substring in a string in SQL.

7. **How to replace a part of the string in SQL?** [Hint: Replace]
   The REPLACE function in SQL can be used to replace a part of a string. The syntax is "REPLACE(string, find_string, replace_with)".

8. **Describe the STRCMP function in SQL, and how it can be used to compare strings.**
   The STRCMP function in SQL is used to compare two strings, and it returns 0 if the strings are equal, 1 if the first string is greater, and -1 if the first string is smaller. The syntax is "STRCMP(string1, string2)".

9. **Explain the use of the SUBSTRING function in SQL and how it can be utilized to extract a section of a string.**
   The SUBSTRING function in SQL can be used to extract a section of a string. The syntax is "SUBSTRING(string, start, length)".

10. **How to reverse the order of characters in a string in SQL?** [Hint: Reverse]
    To reverse the order of characters in a string in SQL, we can use the REVERSE function. The syntax is "REVERSE(string)".

# Section – B: Practice Questions

1. **Write a SQL query to find the length of the country name in the "country" table.** [Hint: Char_length, Character_length]
   SELECT CHAR_LENGTH(name) as name_length FROM country;

2. **Write a SQL query to concatenate the name and code in the "country" table, separated by a space.**[Hint: Concat]
   SELECT CONCAT(name, ' ', code) as full_name FROM country;

3. **Write a SQL query to concatenate the code, name, localname, continent, region in the "country" table, separated by a comma.** [Hint: Concat_ws]
   SELECT CONCAT_WS(',', code, name, localname, continent, region) as countries FROM country;

4. **Write a SQL query to convert the country name to uppercase in the "country" table.**[Hint: UCase, Upper]
   SELECT UPPER(name) FROM country;

5. **Write a SQL query to extract the first 3 characters of the name in the "country" table.**[Hint: Left]
   SELECT LEFT(name, 3) FROM country;

6. **Write a SQL query to extract a substring of 5 characters from the "country" table, starting from the 2nd character and ending at the 7th character of the "name" column in the "country" table.**[Hint: Substring, mid]
   SELECT name, SUBSTRING(name, 2, 5) AS middle_5_characters FROM country;

7. **Write a SQL query to determine the position of code in the country name in the "country" table.** [Hint: Locate, Instr, Position] **(not applicable using code eval)**
   SELECT name, code, POSITION(code IN name) as code_name FROM country;

8. **Write a SQL query to compare the country name and address in the "country" table, and return the result in the form of 0, 1, or -1. (not applicable using code eval)**
   SELECT name, localname, STRCMP(name, localname) AS same_names FROM country;

9. **Write a SQL query to reverse the order of characters in the country name in the "country" table. (not applicable using code eval)**
   SELECT name, REVERSE(name) as new_name FROM country;