abdulrab2101 Assignment Complete 1ed54f7 · now

5385 lines (5385 loc) · 273 KB

Preview Code Blame Raw

Question 1a: Concatenate Multiple Strings (CONCAT)

In [1]:
```
SELECT CONCAT(AddressLine1, ', ', City, ', FL, ', PostalCode) AS Address
FROM Person.Address
WHERE City = 'Miami';
```

(10 rows affected)

Total execution time: 00:00:00.163

Out[1]:

Address
1 Corporate Center Drive, Miami, FL, 33127
20500 S.W. 2512th Ave, Miami, FL, 33127
2545 N.W. 107th Ave., Miami, FL, 33127
2561 Nw 8410th Avenue, Miami, FL, 33127
79945 Corporate Center Drive, Miami, FL, 33127
825 Coral Way, Miami, FL, 33127
83995 South Dixie Highway, Miami, FL, 33127
8525 Nw 17th St., Miami, FL, 33127
Dadeland Mall, Space 25090, Miami, FL, 33127
Flagler Park Plaza, Miami, FL, 33127

Question 1b: ASCII Values

Explanation:

The ASCII function returns the ASCII code value of the leftmost character of a character expression. For example, `ASCII('A')` returns 65.

The CHAR function converts an integer ASCII code to a character. For example, `CHAR(65)` returns 'A'.

Possible Reasons for Using These Functions:

- **ASCII**: To determine the numeric ASCII code of characters for data validation or to convert non-printable characters.
- **CHAR**: To convert ASCII codes back into characters, useful for generating strings from numeric data or encoding special characters.

Question 1c: Integer and Unicode Values

Explanation:

The UNICODE function returns the integer value, as defined by the Unicode standard, for the first character of the input expression. For example, `UNICODE('A')` returns 65.

The NCHAR function returns the Unicode character that corresponds to the input integer value, as defined by the Unicode standard. For example, `NCHAR(65)` returns 'A'.

Possible Reasons for Using These Functions:

- **UNICODE**: To get the Unicode value of characters for applications dealing with internationalization.
- **NCHAR**: To generate characters from Unicode values, useful in multilingual databases and applications.

Question 2a: Locate a Substring

In [2]:
```
SELECT AddressLine1
FROM Person.Address
WHERE City = 'Miami' AND AddressLine1 LIKE '%Ave%';
```

(3 rows affected)

Total execution time: 00:00:00.032

Out[2]:

AddressLine1
20500 S.W. 2512th Ave
2545 N.W. 107th Ave.
2561 Nw 8410th Avenue

Question 2b: Similarity of Strings

In [3]:
```
SELECT DISTINCT
    SOUNDEX(City) AS CitySoundex,
    SOUNDEX('Auburn') AS AuburnSoundex,
    DIFFERENCE(City, 'Auburn') AS Difference,
    City
FROM Person.Address
WHERE DIFFERENCE(City, 'Auburn') = 3;
```

(10 rows affected)

Total execution time: 00:00:00.042

Out[3]:

CitySoundex	AuburnSoundex	Difference	City
A152	A165	3	Abingdon
A216	A165	3	Augsburg
A415	A165	3	Albany
A415	A165	3	Alpine
A645	A165	3	Arlington
A660	A165	3	Aurora
S165	A165	3	Spring Valley
S165	A165	3	Springdale
S165	A165	3	Springfield
S165	A165	3	Springwood

Question 3: Left-Most Portion of a String

In [1]:
```
SELECT ProductNumber, LEFT(ProductNumber, 2) AS LeftTwoCharacters
FROM Production.Product;
```

(504 rows affected)

Total execution time: 00:00:00.277

Out[1]:

ProductNumber	LeftTwoCharacters
AR-5381	AR
BA-8327	BA
BB-7421	BB
BB-8107	BB
BB-9108	BB
BC-M005	BC
BC-R205	BC
BE-2349	BE
BE-2908	BE
BK-M18B-40	BK
BK-M18B-42	BK
BK-M18B-44	BK
BK-M18B-48	BK
BK-M18B-52	BK
BK-M18S-40	BK
BK-M18S-42	BK
BK-M18S-44	BK
BK-M18S-48	BK
BK-M18S-52	BK
BK-M38S-38	BK
BK-M38S-40	BK
BK-M38S-42	BK
BK-M38S-46	BK