

SQL Primer – Assignment 3
SQL Functions and Regular Expressions
SQL Functions

1. Find all customers having name starting from 'A' to 'M'. Print all names in lower case.
2. Find all customers having name ending with 'a', 'e', 'i', 'o', 'u'. Print all names in upper case.
3. Display customer name and city in a single column separated by '-'. Also print customer rating in another column.
4. Display all the customers whose name length is more than their city name length.
5. Display order amount, order amount rounded up to single place of decimal, whole number smaller than order amount, whole number greater than order amount, order amounts rounded in multiple of 100. Hint: use Numeric functions.
6. Get all the orders in the month of October (irrespective of year and date). Also print order date in format 03-Oct-1990 and weekday of the order.
7. Print order amount, order date, difference in number of days between order date and year end (31-Dec-1990), cnum and snum for all orders where last digit of cnum and snum is same. Hint: Use % (mod) operator.
8. Display names of customers in the centre (considering column width of 20 chars). Hint: Pad appropriate spaces to left and right.
9. Display salesman name, comm, and city in a single column aliased as info.
10. Display all customers in ascending order of rating where total length of name and city is more than 12.

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SQL Functions and Regular Expressions

Regular Expressions

```
CREATE TABLE food(word VARCHAR(30));
```

```
INSERT INTO food VALUES ('this'), ('biscuit'), ('isnt'), ('tasty, '), ('but'), ('that'), ('cake'), ('is'), ('really good');
```

1. get all words containing "is"
2. get all words starting with "is"
3. get all words ending with "is"
4. get all words having only is.

```
CREATE TABLE selection(word VARCHAR(30));
```

```
INSERT INTO selection VALUES ('bag'), ('beg'), ('big'), ('bog'), ('bug'), ('b*g'), ('bg'), ('xyz');
```

5. get all words having any one char between b and g.
6. get all words having any one alphabet between b and g.
7. get all words having any one letter between b and g (but not alphabet).
8. get all words having any one letter between b and g out of a, i or u
9. get all words 'b*g'

```
CREATE TABLE repetition(word VARCHAR(40));
```

```
INSERT INTO repetition VALUES ('ww'), ('wow'), ('woow'), ('woooow'), ('woooooow'), ('woooooow'), ('woooooow'), ('woooooow');
```

10. Find word containing 0 or more occurrences of 'o' between two 'w'.
11. Find word containing 0 or 1 occurrence of 'o' between two 'w'.
12. Find word containing 1 or more occurrences of 'o' between two 'w'.
13. Find word containing 0 or more occurrences of 'o' between two 'w'.
14. Find word containing 4 occurrences of 'o' between two 'w'.
15. Find word containing at least 4 occurrences of 'o' between two 'w'.
16. Find word containing at least 3 and at most 6 occurrences of 'o' between two 'w'.

```
CREATE TABLE people (id INT, name VARCHAR(20), email VARCHAR(40), phone VARCHAR(14));
```

Insert few record with valid/invalid email ids and mobile numbers. Examples of valid mobile numbers are 9876543210, 09876543210, +919876543210.

17. get all records where phone numbers are valid.
18. get all records where emails are valid.