

Database Systems

Lab-03

Topic:

- Mapping two or more tables
- Case-Conversion Functions: LOWER, UPPER, INITCAP

Function	Result
LOWER('MySQL Lab')	mysql lab
UPPER('MySQL Lab')	MYSQL LAB
INITCAP('MySQL Lab')	Mysql Lab

- Character-Manipulation Functions: CONCAT, SUBSTR, LENGTH, INSTR, LPAD | RPAD, TRIM, REPLACE

Function	Result
CONCAT('Hello', 'World')	HelloWorld
SUBSTR('HelloWorld',1,5)	Hello
LENGTH('HelloWorld')	10
INSTR('HelloWorld', 'W')	6
LPAD(salary,10,'*')	*****24000
RPAD(salary, 10, '*')	24000*****
REPLACE ('JACK and JUE','J','BL')	BLACK and BLUE
TRIM('H' FROM 'HelloWorld')	elloWorld

- Number Functions: ROUND, TRUNC, MOD

Function	Result
ROUND (45.926, 2)	45.93
TRUNC (45.926, 2)	45.92
MOD (1600, 300)	100

- Date function:

Function	Result
SYSDATE()	2022-02-22 18:22:45
CURDATE()	2022-02-22
DATEDIFF('2022-02-23', '2020-04-22')	672
DATE_SUB(CURDATE(), INTERVAL 5 MONTH)	2021-09-23
DATE_ADD(CURDATE(), INTERVAL 5 MONTH)	2022-07-23

- Aggregate Functions: AVG(), MIN(), MAX(), SUM(), COUNT()

Queries for exercise:

1. What is the address, district and phone number of each of the customers?
2. What is the city and country of each of the customers?
3. List all the films by every actor
4. Display the first and last name of each actor in a single column in upper case letters
5. Show "The capital of A is B" where A is the name of country and B is its capital from country table-
 - a. In upper case
 - b. Lower case
6. What is the length of the password of the account of each staff?
7. What is the length of the email address of the customers without domain name?
8. Round the population of the countries in million
9. Show the life expectancy in years only for each continent
10. What is your age in months?
11. What is the date after 167 days?
12. What is the total population of each district? (Use city table)
13. How many districts in each country? (Use city table)
14. What is the total population of each continent?
15. Which country has the maximum population?
16. What is the average population of the world?
17. What is the minimum life expectancy of the world?
18. How many actors acted in each film? (hints: use film_actor table)

19. What is the minimum length of a film?
20. What is the average rating of the film?