

Lab Guide 21

Instructor	: Nimet Ceren SERİM	Week:	13
Assistant	: Engin Zafer KIRAÇBEDEL, Hatice Zehra YILMAZ	Date:	15-16.12.2025

Aim of this lab session: 1. PL/SQL Practice on Health Care Management System Database

ORACLE Server Configurations:

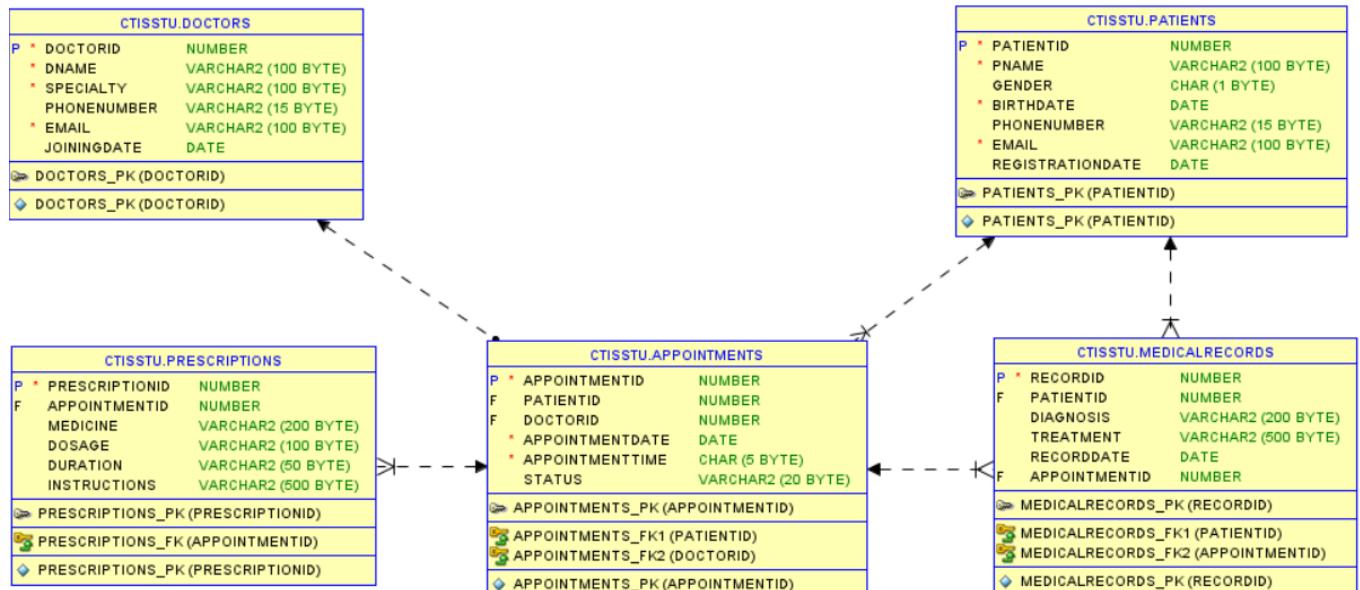
IP Address: 139.179.33.231

Port number: 1522

SID: orclctis

Please USE stu (fYourStudentID) accounts

The Healthcare Management System is designed to manage and organize information about patients, doctors, appointments, prescriptions, and medical records. It ensures that healthcare providers can maintain accurate records, schedule appointments, and deliver quality medical services.



Download the **HealthIns.zip** file from moodle **LABGUIDES/LG21** and run the data insertion scripts. So, the new records will be inserted into the tables: appointments and prescriptions .Latest version of the tables is as follows;

Appointments

	APPOINTMENTID	PATIENTID	DOCTORID	APPOINTMENTDATE	APPOINTMENTTIME	STATUS
1	1	1	1	21-NOV-24	10:00	Completed
2	2	2	2	22-NOV-24	14:00	Completed
3	3	1	3	23-NOV-24	16:00	Completed
4	4	4	4	24-NOV-24	09:00	Completed
5	5	2	3	23-NOV-24	16:00	Completed
6	6	1	2	25-DEC-24	10:00	Scheduled
7	7	1	1	14-DEC-24	10:00	Completed
8	8	3	2	01-DEC-25	11:00	Cancelled
9	9	1	4	05-DEC-25	10:30	Cancelled
10	10	4	1	03-DEC-25	15:00	Cancelled
11	11	2	3	18-DEC-25	13:45	Scheduled
12	12	3	4	19-DEC-25	09:00	Scheduled
13	13	4	2	20-DEC-25	11:15	Scheduled
14	14	1	3	21-DEC-25	16:30	Scheduled
15	15	3	1	22-DEC-25	14:00	Scheduled
16	16	2	4	23-DEC-25	10:15	Scheduled
17	17	4	3	24-DEC-25	12:00	Scheduled

Prescriptions:

	PREScriptionID	APPOINTMENTID	MEDICINE	DOSAGE	DURATION	INSTRUCTIONS
1	1	2	Aspirin	1 tablet	7 days	Take after meals
2	2	2	Antibiotic	2 capsules	5 days	Take with water
3	3	3	Vitamin C	1 tablet	10 days	Take in the morning
4	4	7	Paracetamol	500mg	5 days	Take 1 tablet every 6 hours
5	5	11	Cough Syrup	10ml	7 days	Take before bedtime
6	6	12	Antibiotic	1 capsule	10 days	Take with meals
7	7	13	Vitamin D	1 tablet	1 month	Take in the morning
8	8	14	Antihistamine	1 tablet	5 days	Take at night before sleep
9	9	15	Painkiller	2 tablets	3 days	Take as needed for pain
10	10	11	Antifungal Cream	Apply thin layer	2 weeks	Use twice daily on affected area

Creating View

Create a view that displays the number of appointments of each doctor along with the doctor id, doctor name and specialty.

DOCTORID	DNAME	SPECIALTY	NUMBEROFAPPOINTMENTS
4	Dr. John Taylor	Orthopedics	4
2	Dr. Michael Adams	Dermatology	4
3	Dr. Sarah Lee	Pediatrics	5
1	Dr. Emily Carter	Cardiology	4

Creating Procedures & Functions

Create the specified procedures or functions and write the anonymous PL/SQL blocks to execute them.

Q1.

Write a procedure that deletes the appointments that have been "Cancelled" for more than a week and displays the number of deleted appointments or a warning message like "There is NO cancelled appointments older than 7 days".

Write an anonymous block to test your procedure.

The screenshot shows the Oracle SQL Developer interface with the 'Script Output' tab selected. The output window displays the following text:

```
Script Output X
Task completed in 0.07 seconds
Procedure DELETECANCELLEDAPPOINTMENTS compiled
3 Cancelled appointments older than 7 days have been deleted.
PL/SQL procedure successfully completed.
```

A yellow box highlights the message "3 Cancelled appointments older than 7 days have been deleted."

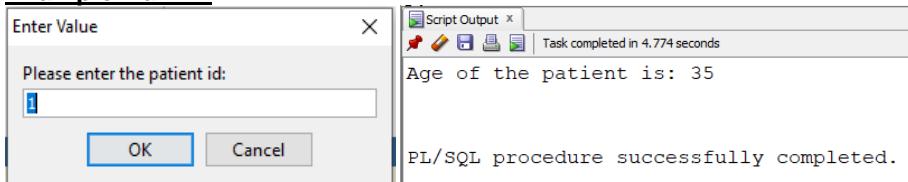
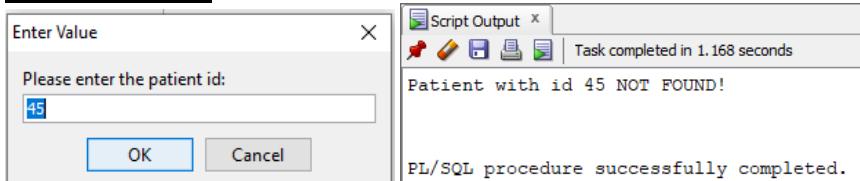
Updated version of Appointments table:

	APPOINTMENTID	PATIENTID	DOCTORID	APPOINTMENTDATE	APPOINTMENTTIME	STATUS
1	1	1	1	21-NOV-24	10:00	Completed
2	2	2	2	22-NOV-24	14:00	Completed
3	3	1	3	23-NOV-24	16:00	Completed
4	4	4	4	24-NOV-24	09:00	Completed
5	5	2	3	23-NOV-24	16:00	Completed
6	6	1	2	25-DEC-24	10:00	Scheduled
7	7	1	1	14-DEC-24	10:00	Completed
8	11	2	3	18-DEC-25	13:45	Scheduled
9	12	3	4	19-DEC-25	09:00	Scheduled
10	13	4	2	20-DEC-25	11:15	Scheduled
11	14	1	3	21-DEC-25	16:30	Scheduled
12	15	3	1	22-DEC-25	14:00	Scheduled
13	16	2	4	23-DEC-25	10:15	Scheduled
14	17	4	3	24-DEC-25	12:00	Scheduled

Q2.

Write a function that gets the patient id as input parameter, calculates and returns the age of the patient. Do not forget to write NO_DATA_FOUND exception. If patients NOT found, the function displays an appropriate message and returns -1;

Write an anonymous block to test your function.

Example Run#1:**Example Run#2:****Q3.**

Write a procedure that displays the information of all doctors (Doctor Name and the Number of appointments) with their appointments' details (Appointment date, appointment time and patient name). If no appointments exist, a warning message will be displayed. Write an anonymous block to test your procedure.

```
Script Output X
Task completed in 0.151 seconds

Procedure DOCTORAPPOINTMENTS compiled

Doctor: Dr. Emily Carter
Number of Appointments: 3
*****
Appointment Info: 2024-11-21 @10:00, Alice Johnson
Appointment Info: 2024-12-14 @10:00, Alice Johnson
Appointment Info: 2025-12-22 @14:00, Charlie Brown
-----

Doctor: Dr. Michael Adams
Number of Appointments: 3
*****
Appointment Info: 2024-11-22 @14:00, Bob Smith
Appointment Info: 2024-12-25 @10:00, Alice Johnson
Appointment Info: 2025-12-20 @11:15, Diana Prince
-----

Doctor: Dr. Sarah Lee
Number of Appointments: 5
*****
Appointment Info: 2024-11-23 @16:00, Alice Johnson
Appointment Info: 2024-11-23 @16:00, Bob Smith
Appointment Info: 2025-12-18 @13:45, Bob Smith
Appointment Info: 2025-12-21 @16:30, Alice Johnson
Appointment Info: 2025-12-24 @12:00, Diana Prince
-----

Doctor: Dr. John Taylor
Number of Appointments: 3
*****
Appointment Info: 2024-11-24 @09:00, Diana Prince
Appointment Info: 2025-12-19 @09:00, Charlie Brown
Appointment Info: 2025-12-23 @10:15, Bob Smith
-----

PL/SQL procedure successfully completed.
```