



Pázmány Péter Catholic University  
Faculty of Information Technology and Bionics

# SQL Basics

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**Database Systems I. Lab**

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# Insert

- **INSERT INTO tablename [ (attr1[,attr3[,attrx]]) ]  
VALUES (val1[,val2[,valx]]);**
- INSERT INTO worker (name, age, tasks) VALUES ('Joe', 40, 'Manager');  
INSERT INTO worker VALUES ('Steve', 32, 'Administrator');
- **For DATE attributes use the to\_date() function!**  
CREATE TABLE temp\_date(  
a DATE  
);
- INSERT INTO temp\_date (a) VALUES(  
to\_date('1962-05-20', 'yyyy-mm-dd')



# Insert

patient_id	p_name	sex	admission_date	alzheimer_diagnosis	age
P1500	Irvin Brody	male	24-10-2004	mild	46
P9700	Clifton Norman	male	02-08-2010	severe	85
P9500	Arden Rodger	female	04-09-2010	moderate	72
P4000	Harland Wilbur	male	17-06-2008	moderate	69
P8000	Henry Kip	male	28-07-2009	severe	73

Treatment_id	Patient_id	Drug	DCost	Adm_time	consultant
T001	P1500	Donepezil	57	24-10-2004 21:18:27	Dr. Green
T002	P9700	Memantine	128	02-08-2010	Dr. Green
T003	P1500	Donepezil	55	31-10-2004 09:12:43	Dr. Green

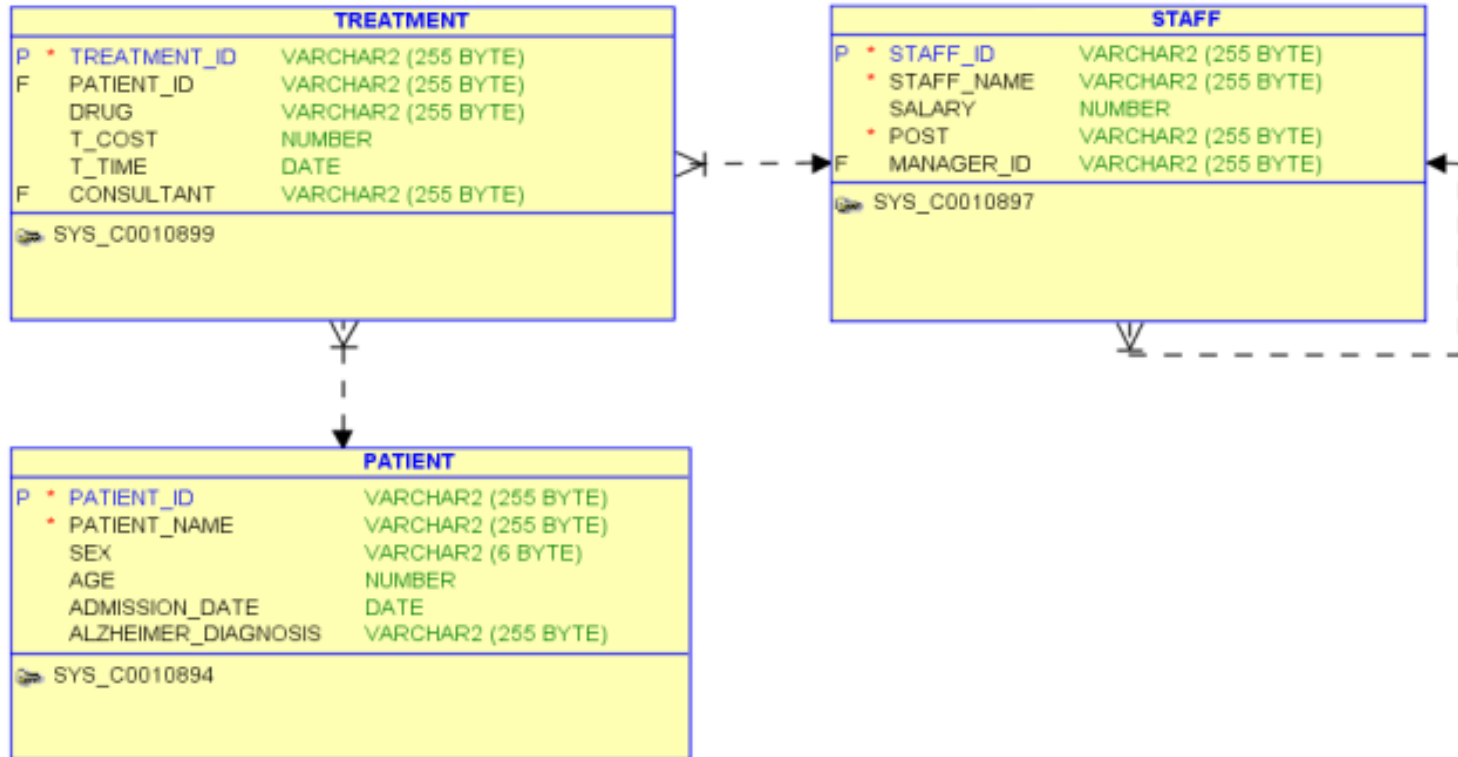


# Select

- **SELECT attribute\_names (or \* for all attributes)**  
**FROM table\_names**  
**[WHERE conditions];**
- Rel. Alg. Selection and Projection together
- **SELECT \* FROM worker;**



# Select



- `SELECT * FROM STP.patient;`
- List the current age of patients, note that the age is the age at the admission date. Current date: `SYSDATE`
- List the patients who have an admission date later than 2005.01.01 ordered by their age .



# Where clause – Patter matching

- String data, pattern matching with %
- ```
SELECT *  
FROM STP.patient  
WHERE patient _name LIKE 'A%';
```
- Get the patients who has „ar” in their name
- What is the ID of the patient whos name starts with „Henry”?



# Where clause - NULL

- IS NULL, IS NOT NULL
- ```
SELECT *  
FROM STP.patient  
WHERE patient _name IS NULL;
```
- Get the lines from treatment where the cost is not „empty”.
- Select all lines from treatment but substitute null values with 0; use the nvl()
- Try  

```
SELECT *  
FROM STP.treatment  
WHERE cost<60 OR cost >=60;
```