



Pázmány Péter Catholic University
Faculty of Information Technology and Bionics

SQL Basics

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Database Systems I. Lab

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Oracle Types

- VARCHAR(size) – variable length, max 2000byte
- VARCHAR2(size) – variable length, max 4000byte
- CHAR(size) – fix length
- NUMBER - numbers
- DATE – date and time (!!) type – time is not obligatory, but it is there
- Other types:
http://docs.oracle.com/cd/B28359_01/server.111/b28318/datatype.htm



Constraints

- NOT NULL
- UNIQUE
- CHECK – all elements should meet a logical expression
- PRIMARY KEY
- FOREIGN KEY



Create table

treatment

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

<http://www.dpriver.com/pp/sqlformat.htm>



Alter table

- **ALTER TABLE tablename**
 <ADD attrib type constraint [, attrib type
 constraint]
 | MODIFY attrib type constraint [, attribnév attrib
 type constraint]
 | DROP COLUMN attribname>;
- ALTER TABLE worker DROP COLUMN age;
- ALTER TABLE worker MODIFY ssn PRIMARY KEY;



Alter table

Add new columns to patient

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



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

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