Databases II
2019-09-19

1. Give the owner and name of the tables which have column name beginning with letter 'Z'.

```
select owner, table_name from dba_tab_columns
where column_name like 'Z%'
group by owner, table_name;
```

2. Write a PL/SQL procedure, which prints out the owners and names of the tables beginning with the parameter character string.

```
create or replace procedure table_print(p_char VARCHAR2) is
   CURSOR cur IS select owner, table_name from dba_tables
            where table_name like p_char||'%';
   rec cur%ROWTYPE;
begin
   open cur;
   loop
      fetch cur into rec;
      exit when cur%NOTFOUND;
      dbms_output.put_line(rec.owner||' - '||rec.table_name);
   end loop;
end;
/
set serveroutput on;
execute table_print('EM');
```

3. Give the following query (in ARAMIS database):
SELECT * FROM sz1;
Is there a table named 'sz1' ? (Answer -> no)
Then which is the table (owner, table_name) whose records are displayed?
You should find a table, a view is not enough.

```
SELECT *
FROM DBA_TABLES
WHERE table_name = 'SZ1'; --No results


SELECT *
FROM DBA_OBJECTS
WHERE object_name = 'SZ1'; --What is the type? A synonym...

SELECT *
FROM DBA_SYNONYMS
WHERE synonym_name = 'SZ1'; --So it is a synonym for V1!

SELECT *
FROM DBA_OBJECTS
WHERE object_name = 'V1'; --Looks like V1 is a view. For which table(s)?

SELECT *
FROM DBA_VIEWS
WHERE view_name = 'V1'; --What is the TEXT for V1?

SELECT TEXT
FROM DBA_VIEWS
WHERE view_name = 'V1'; --So originally the data in view V1 is from the table EMP!
```

4. a) Create your own copy of EMP and DEPT tables (if you don't have already).

```
CREATE TABLE emp AS SELECT * FROM nikovits.emp;
CREATE TABLE dept AS SELECT * FROM nikovits.dept;
```

4. b) Create a sequence to generate numbers for department number columns of the tables.
(start with 50, increment by 10)
INSERT a new department. The department numbers should be generated by the sequence.

```
create sequence seq1 start with 50 increment by 10 nocycle;
```

insert into dept values (seq1.nextval, 'FUN', 'Budapest');

-To view current value of seq1:

select seq1.currval from dual;

5. Give the names and sizes of database files.

select file_name, bytes from dba_data_files;

6. Give the names of tablespaces.

select tablespace_name from dba_tablespaces;

7. Which datafile belongs to which tablespace?

select file_name, tablespace_name from dba_data_files;

8. Is there a tablespace that doesn't have datafiles?

(select tablespace_name from dba_tablespaces)
minus
(select tablespace_name from dba_data_files);

9. What is the block size in USERS tablespace?

select block_size from dba_tablespaces where tablespace_name = 'USERS';

10. Find segments whose owner is NIKOVITS. What segment types do they have? List the types.

select unique segment_type from dba_segments
where owner = 'NIKOVITS';