Databases II
2019-09-26

1. How many extents there are in file 'users02.dbf' ? (no_extents)

```
select count(*) no_extents from dba_extents
where file_id = (
   select file_id
   from dba_data_files
   where file_name like '%users02.dbf%'
);
```

2. How many bytes do they occupy? (sum_bytes)

```
select sum(bytes) sum_bytes from dba_extents
where file_id = (
   select file_id
   from dba_data_files
   where file_name like '%users02.dbf%'
);
```

3. How many free extents there are in file 'users02.dbf', and what is the summarized size of them ? (num, sum_bytes)

```
select count(*) num, sum(bytes) sum_bytes
from dba_free_space
where file_id = (
   select file_id
   from dba_data_files
   where file_name like '%users02.dbf%'
);
```

4. How many percentage of file 'users02.dbf' is full (allocated to some object)?

```
select round((sum(e.bytes)/df.bytes),4)*100||'%' no_extents
from dba_extents e, dba_data_files df
where e.file_id = (
   select file_id
   from dba_data_files
   where file_name like '%users02.dbf%'
) and e.file_id=df.file_id
group by df.bytes;
```

5. Who is the owner whose objects occupy the most space in the database? (owner, sum_bytes)

```
select * from
(select owner, sum(bytes)
from dba_extents
group by owner, segment_name
order by 2 desc)
where rownum<2;
```

6. Is there a table of owner NIKOVITS that has extents in more than one datafile? (table_name)

```
select segment_name table_name
from dba_extents
where owner='NIKOVITS' and segment_type='TABLE'
group by segment_name
having count(distinct file_id)>1;
```

7. Select one from the above tables (e.g. tabla_123) and give the occupied space by files. (filename, bytes)

```
select df.file_name filename, sum(e.bytes) bytes
from dba_extents e, dba_data_files df
where owner='NIKOVITS' and
segment_name='TABLA_123' and
e.file_id=df.file_id
group by df.file_name;
```

8. Which is the oldest table of owner NIKOVITS?

```
select min(created) from dba_objects
where object_type='TABLE' and owner='NIKOVITS';
```

Homework: Write a PL/SQL procedure, which prints out for the parameter user his/her oldest table (which was created earliest) the size of the table in bytes (the size of the table's segment) and the creation date. (table_name, bytes, created)

```
CREATE OR REPLACE PROCEDURE oldest_table(p_user VARCHAR2) IS
...
SET SERVEROUTPUT ON
execute oldest_table('NIKOVITS');
```

We'll start with this on next Lab!