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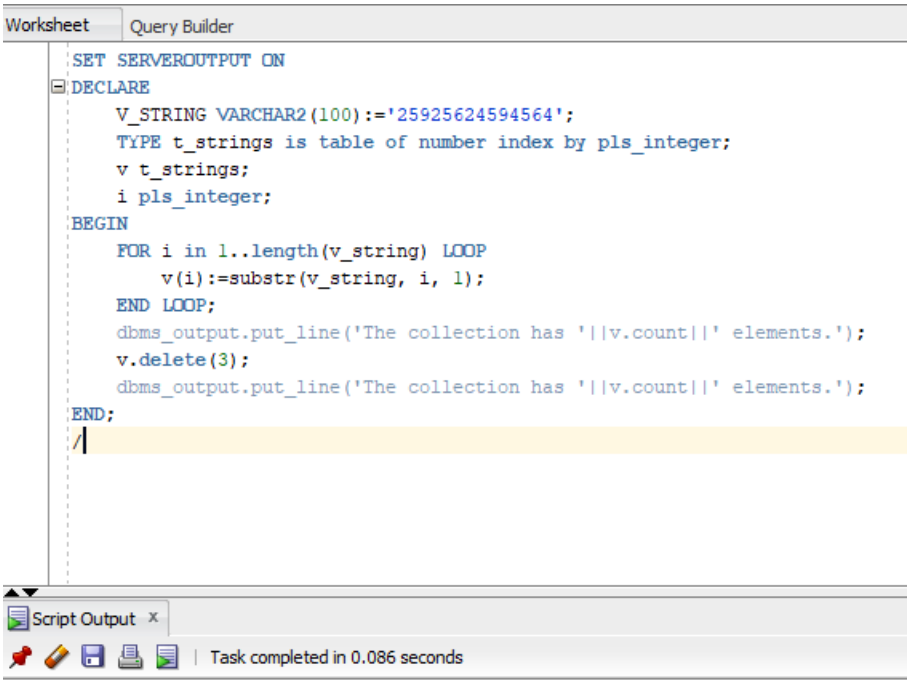
Group 1064

Assignment – Seminar 5

1. Fie un șir de cifre stocat într-o variabilă de tip VARCHAR2. Să se parcurgă șirul iar fiecare cifră să se stocheze într-o colecție de tip index-by-table. Să se șteargă al treilea element din colecție. Să se parcurgă colecția cu FOR și cu WHILE – se va include cod + captură de eran

The code where I used FOR:

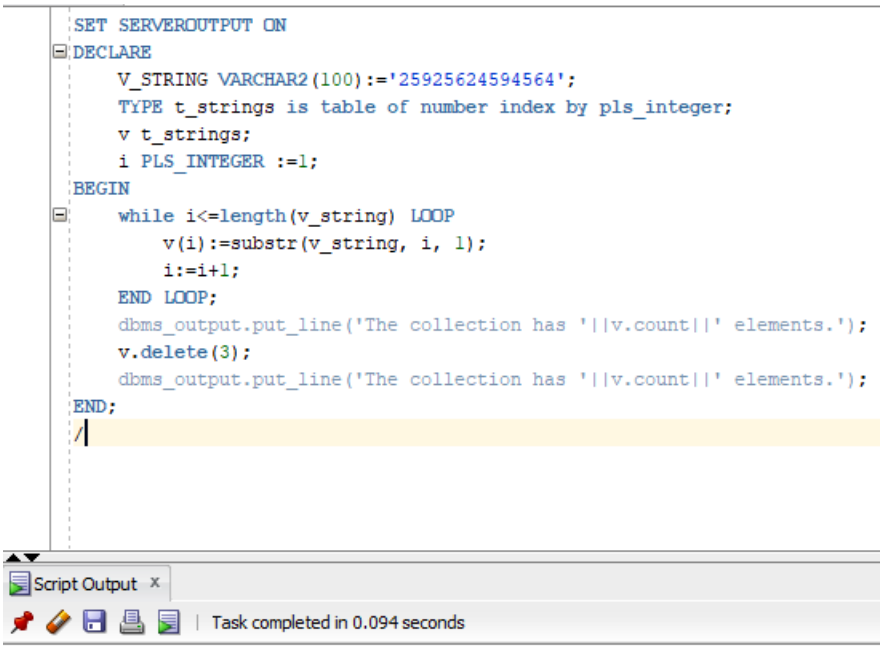
```
SET SERVEROUTPUT ON
DECLARE
   V_STRING VARCHAR2(100):='25925624594564';
   TYPE t_strings is table of number index by pls_integer;
   v t_strings;
   i pls_integer;
BEGIN
   FOR i in 1..length(v_string) LOOP
      v(i):=substr(v_string, i, 1);
   END LOOP;
   dbms_output.put_line('The collection has '||v.count||' elements.');
   v.delete(3);
   dbms_output.put_line('The collection has '||v.count||' elements.');
END;
/
```



The code where I used WHILE:

```
SET SERVEROUTPUT ON
DECLARE
   V_STRING VARCHAR2(100):='25925624594564';
   TYPE t_strings is table of number index by pls_integer;
   v t_strings;
   i PLS_INTEGER :=1;
BEGIN
```

```
    while i<=length(v_string) LOOP
       v(i):=substr(v_string, i, 1);
       i:=i+1;
    END LOOP;
    dbms_output.put_line('The collection has '||v.count||' elements.');
    v.delete(3);
    dbms_output.put_line('The collection has '||v.count||' elements.');
END;
/
```



```
SET SERVEROUTPUT ON
DECLARE
    V_STRING VARCHAR2(100):='25925624594564';
    TYPE t_strings is table of number index by pls_integer;
    v t_strings;
    i PLS_INTEGER :=1;
BEGIN
    while i<=length(v_string) LOOP
        v(i):=substr(v_string, i, 1);
        i:=i+1;
    END LOOP;
    dbms_output.put_line('The collection has '||v.count||' elements.');
    v.delete(3);
    dbms_output.put_line('The collection has '||v.count||' elements.');
END;
/
```

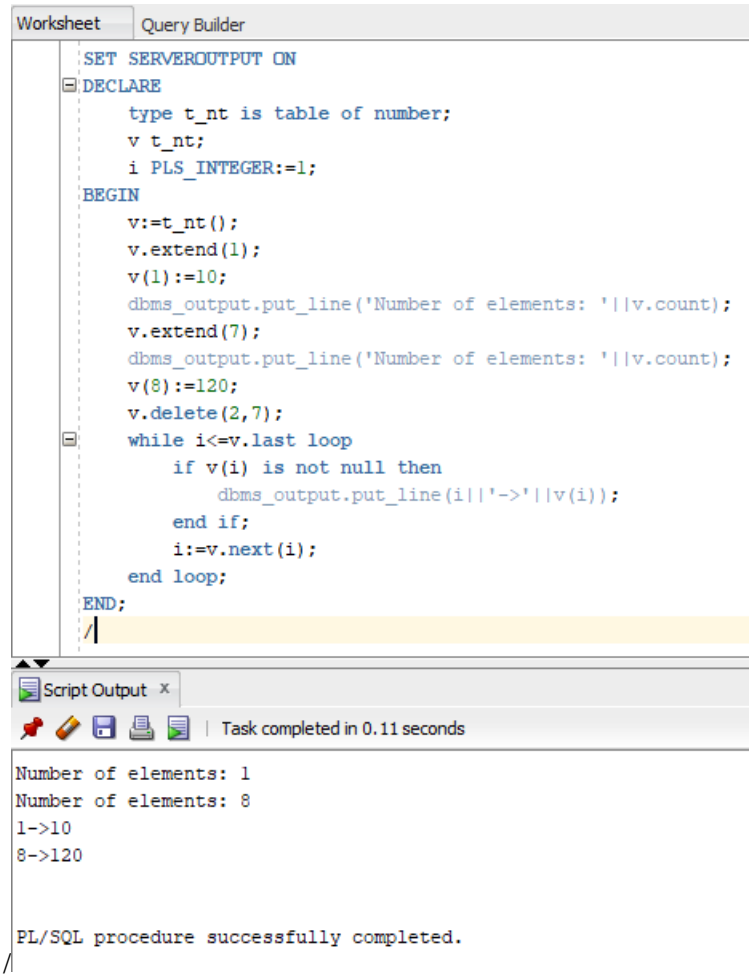
Script Output | Task completed in 0.094 seconds

```
The collection has 13 elements.


PL/SQL procedure successfully completed.

The collection has 14 elements.
The collection has 13 elements.


PL/SQL procedure successfully completed.
```

2. Rezolvați problema astfel încât elementele care nu există să nu fie afișate. Se vor folosi 2 variante.

The code where I used WHILE and NEXT:

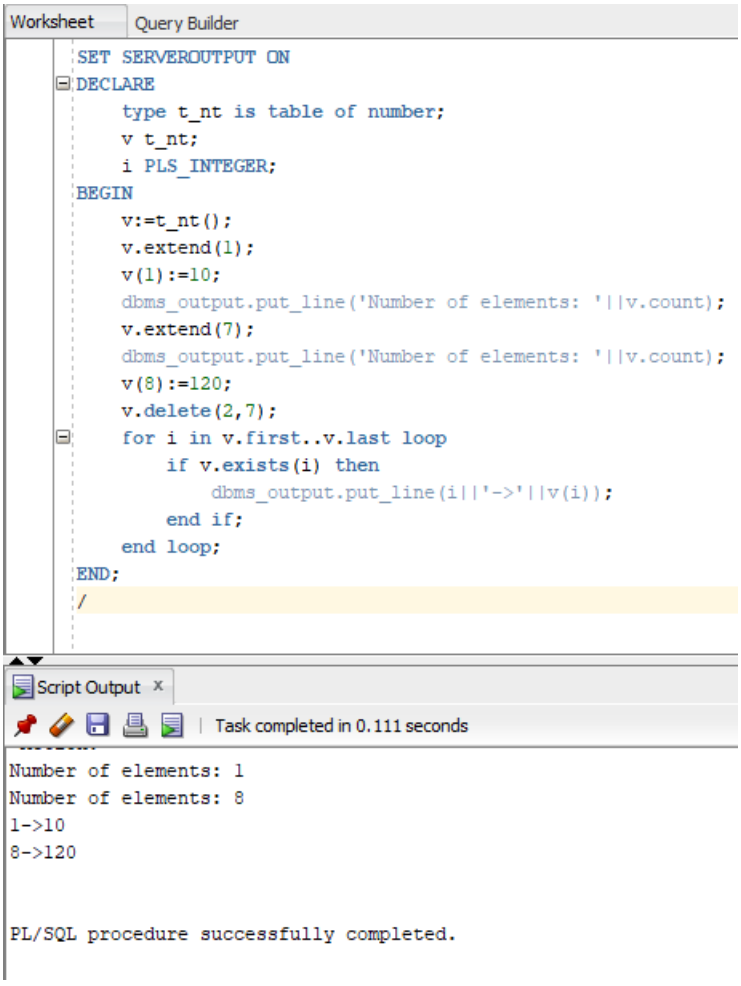
```
SET SERVEROUTPUT ON
DECLARE
   type t_nt is table of number;
   v t_nt;
   i PLS_INTEGER:=1;
BEGIN
   v:=t_nt();
   v.extend(1);
   v(1):=10;
   dbms_output.put_line('Number of elements: '||v.count);
   v.extend(7);
   dbms_output.put_line('Number of elements: '||v.count);
   v(8):=120;
   v.delete(2,6);
   while i<=v.last loop
      if v(i) is not null then
         dbms_output.put_line(i||'->'||v(i));
      end if;
      i:=v.next(i);
   end loop;
END;
```



The code where I used FOR AND EXISTS:

```
SET SERVEROUTPUT ON

DECLARE

   type t_nt is table of number;

   v t_nt;

   i PLS_INTEGER;

BEGIN

   v:=t_nt();

   v.extend(1);

   v(1):=10;

   dbms_output.put_line('Number of elements: '||v.count);
```

```
    v.extend(7);
    dbms_output.put_line('Number of elements: '||v.count);
    v(8):=120;
    v.delete(2,7);
    for i in v.first..v.last loop
        if v.exists(i) then
            dbms_output.put_line(i||'->'||v(i));
        end if;
    end loop;
END;
/
```



3. Sa se afiseze denumirea si categoria produselor care au fost sterse

```
SET SERVEROUTPUT ON
DECLARE
TYPE tab_tari IS VARRAY(10) OF countries.country_name%type;
TYPE tab_produse IS table of product_information%rowtype;
v tab_tari;
p tab_produse;
BEGIN
 SELECT country_name BULK COLLECT INTO v FROM countries WHERE REGION_ID=1;
 for i in 1..v.count loop
     dbms_output.put_line(v(i));
 end loop;

 delete from PRODUCT_INFORMATION where product_id not in (select product_id from order_items)
 returning product_id,product_name, product_description, category_id, weight_class, supplier_id,
       product_status, list_price, min_price, catalog_url
       BULK COLLECT INTO p;

 dbms_output.put_line('There were '||p.count||' deleted products');

 for i in p.first..p.last loop
    dbms_output.put_line('The name of the deleted product is '||p(i).product_name||' and the category ID is
'||p(i).category_id);
end loop;
rollback;
END;
```

/

Worksheet | Query Builder

```
SET SERVEROUTPUT ON
DECLARE
TYPE tab_tari IS VARRAY(10) OF countries.country_name%type;
TYPE tab_produse IS table of product_information%rowtype;
v tab_tari;
p tab_produse;
BEGIN
 SELECT country_name BULK COLLECT INTO v FROM countries WHERE REGION_ID=1;
 for i in 1..v.count loop
      dbms_output.put_line(v(i));
 end loop;

 delete from PRODUCT_INFORMATION where product_id not in (select product_id from order_items)
 returning product_id,product_name, product_description, category_id, weight_class, supplier_id,
        product_status, list_price, min_price, catalog_url
        BULK COLLECT INTO p;

 dbms_output.put_line('There were '||p.count||' deleted products');

 for i in p.first..p.last loop
     dbms_output.put_line('The name of the deleted product is '||p(i).product_name||' and the category ID is '||p(i).category_id);
end loop;
rollback;
END;
/
```

Script Output | Task completed in 0.134 seconds

```
The name of the deleted product is Web Browser - SB/S 2.1 and the category ID is 29
The name of the deleted product is Desk - S/V and the category ID is 31
The name of the deleted product is Desk - W/48/R and the category ID is 31
The name of the deleted product is Desk - OS/O/F and the category ID is 31
The name of the deleted product is Mobile Web Phone and the category ID is 31
The name of the deleted product is Paper Tablet LW 8 1/2 x 11 and the category ID is 32
The name of the deleted product is Card Organizer Cover and the category ID is 32
The name of the deleted product is Business Cards Box - 250 and the category ID is 32
The name of the deleted product is Card Organizer - 1000 and the category ID is 32


PL/SQL procedure successfully completed.
```