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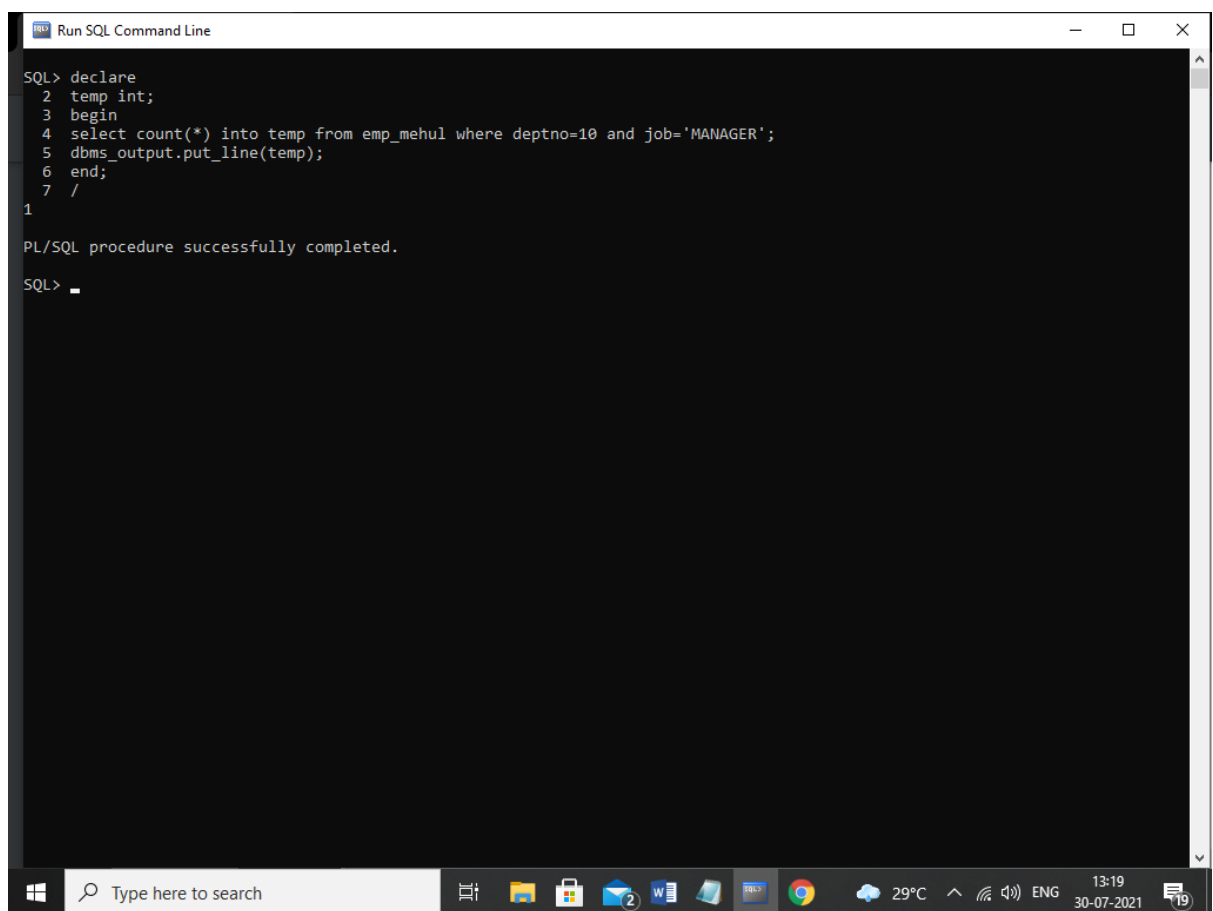
Roll No : 306 SYIT

Assignment 1

1. Explain INTO clause with syntax and example

Ans: Into clause is used to fetch a single row of data from a table into variables in the simplest and the fastest way.

Syntax: `SELECT select_list INTO variable_list FROM table_name WHERE condition;`



```
SQL> declare
2  temp int;
3  begin
4  select count(*) into temp from emp_mehul where deptno=10 and job='MANAGER';
5  dbms_output.put_line(temp);
6  end;
7  /
1
PL/SQL procedure successfully completed.
SQL> _
```

2. Explain %type with syntax and example.

Ans: %TYPE attribute provides the data type of a database column to a variable. It is generally used when variables need to hold the value of the same type as declared in the database.

Syntax `variablename tablename.columnname%type [:= value];`

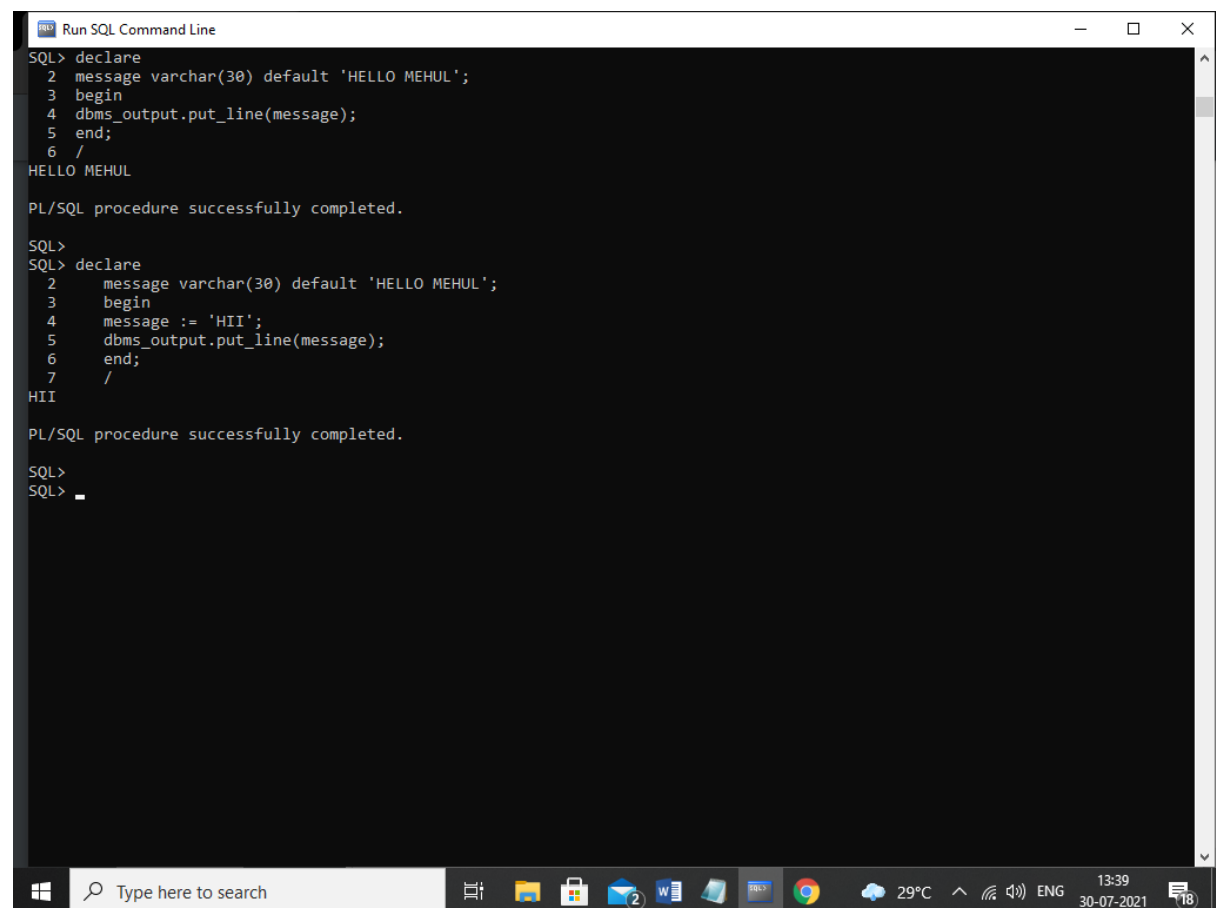
```
Run SQL Command Line
SQL> declare
2  mm emp_mehul.sal%type;
3  begin
4  select sum(sal) into mm from emp_mehul where deptno=20;
5  dbms_output.put_line(mm);
6  end;
7  /
10875
PL/SQL procedure successfully completed.
SQL> _
```

3. Write a PL/SQL block to print the total number of employees working as MANAGER in deptno 20.

```
Run SQL Command Line
SQL> declare
2  temp int;
3  begin
4  select count(*) into temp from emp_mehul where deptno=20 and job='MANAGER';
5  dbms_output.put_line('the total number of employees working as MANAGER in 20 are '||temp);
6  end;
7  /
the total number of employees working as MANAGER in 20 are 1
PL/SQL procedure successfully completed.
SQL>
```

4. What are default variables? How can they be initialized in PL/SQL blocks? Can the value of default variable be changed during execution of program, explain with example?

Ans: When a variable is declared in plsql it assigns a default value of NULL or a default value can optionally be given to it but in order to change the value, you have to re-assign in between the begin and end block. For example:



```
SQL> declare
2  message varchar(30) default 'HELLO MEHUL';
3  begin
4  dbms_output.put_line(message);
5  end;
6  /
HELLO MEHUL

PL/SQL procedure successfully completed.

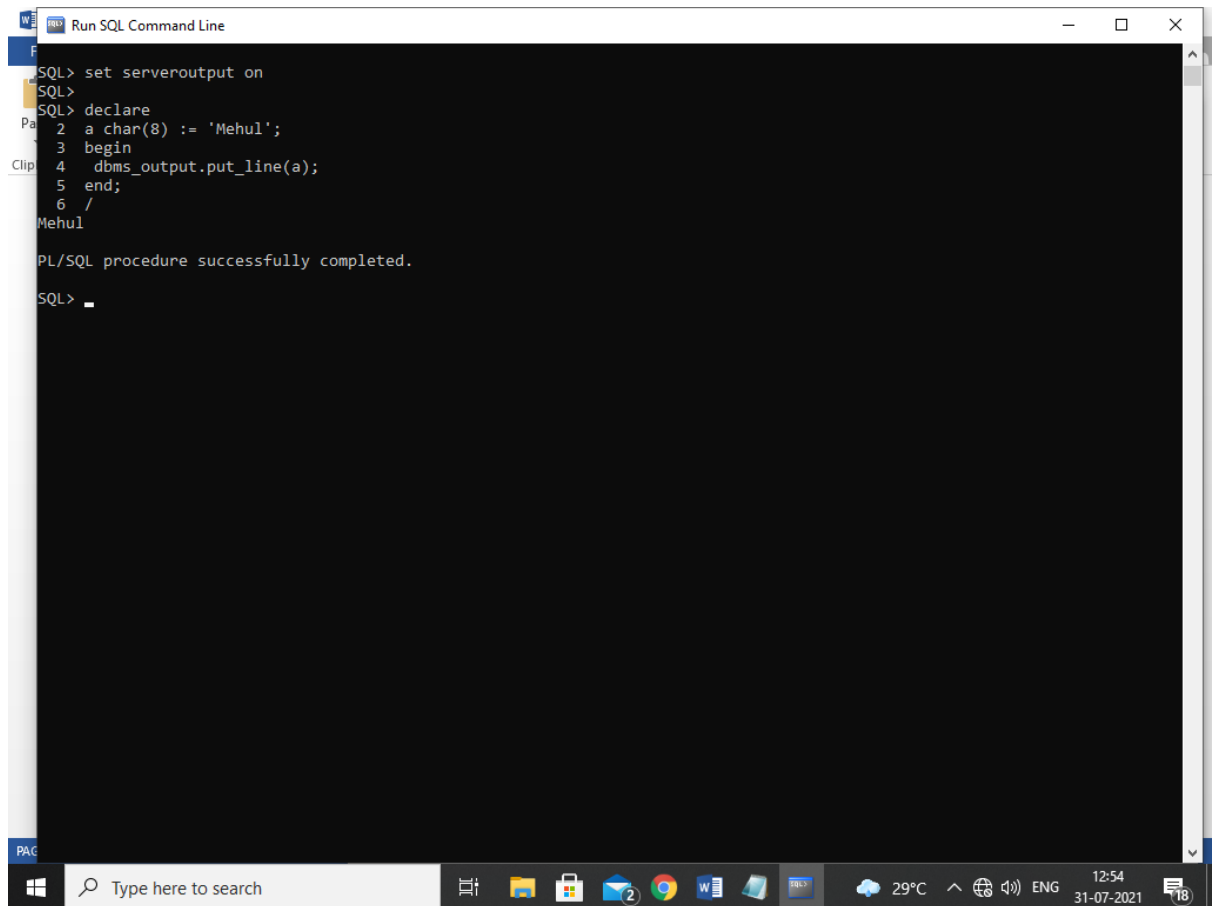
SQL>
SQL> declare
2  message varchar(30) default 'HELLO MEHUL';
3  begin
4  message := 'HII';
5  dbms_output.put_line(message);
6  end;
7  /
HII

PL/SQL procedure successfully completed.

SQL>
SQL>
```

5. What are datatypes? Briefly describe its types. Also give an example.

ANS: Datatypes are used to define how the data will be stored, handled, and treated by Oracle during the data storage and processing. The data types are as follows: ○ Char: This data type stores the string value, and the size of the string is fixed at the time of declaring the variable. Syntax Variable char(10) := 'assigne value'; Example:

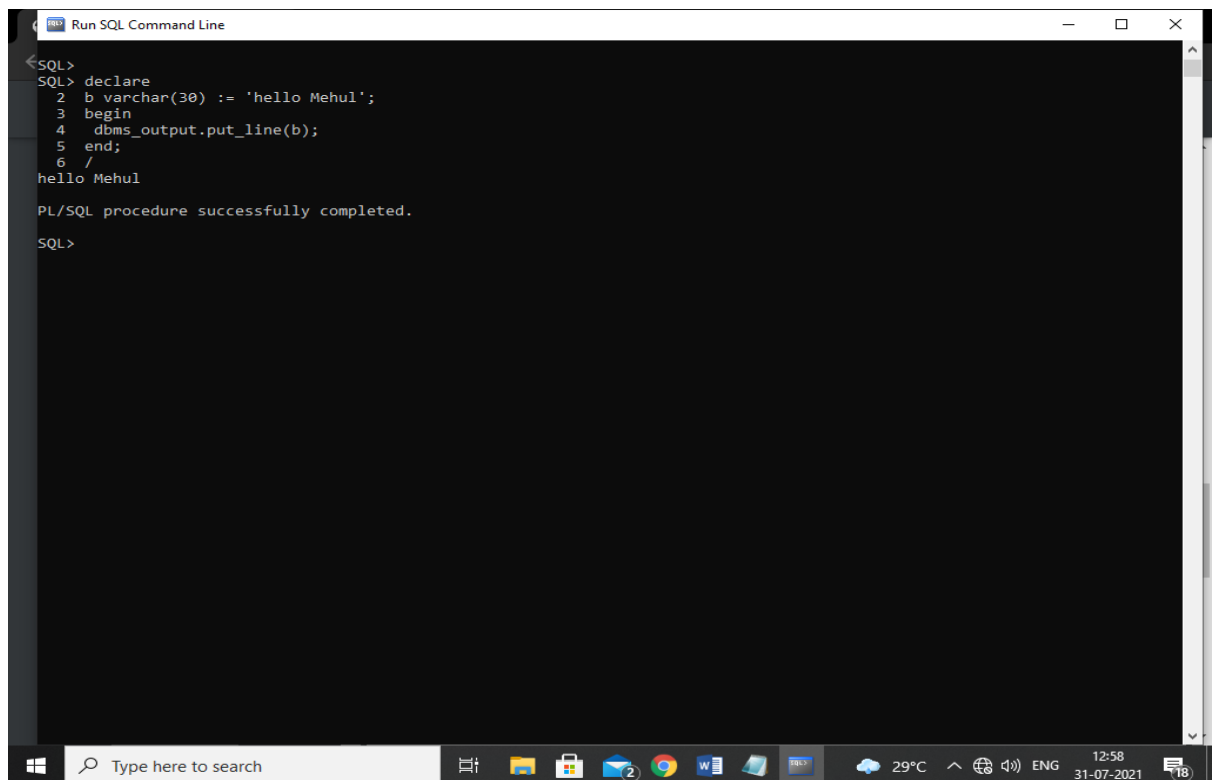


```
SQL> set serveroutput on
SQL>
SQL> declare
2  a char(8) := 'Mehul';
3  begin
4  dbms_output.put_line(a);
5  end;
6  /
Mehul

PL/SQL procedure successfully completed.

SQL> _
```

Varchar: this data type stores the string, but the length of the string is not fixed. Syntax Variable `varchar(20) := 'hello mehul';` Example:

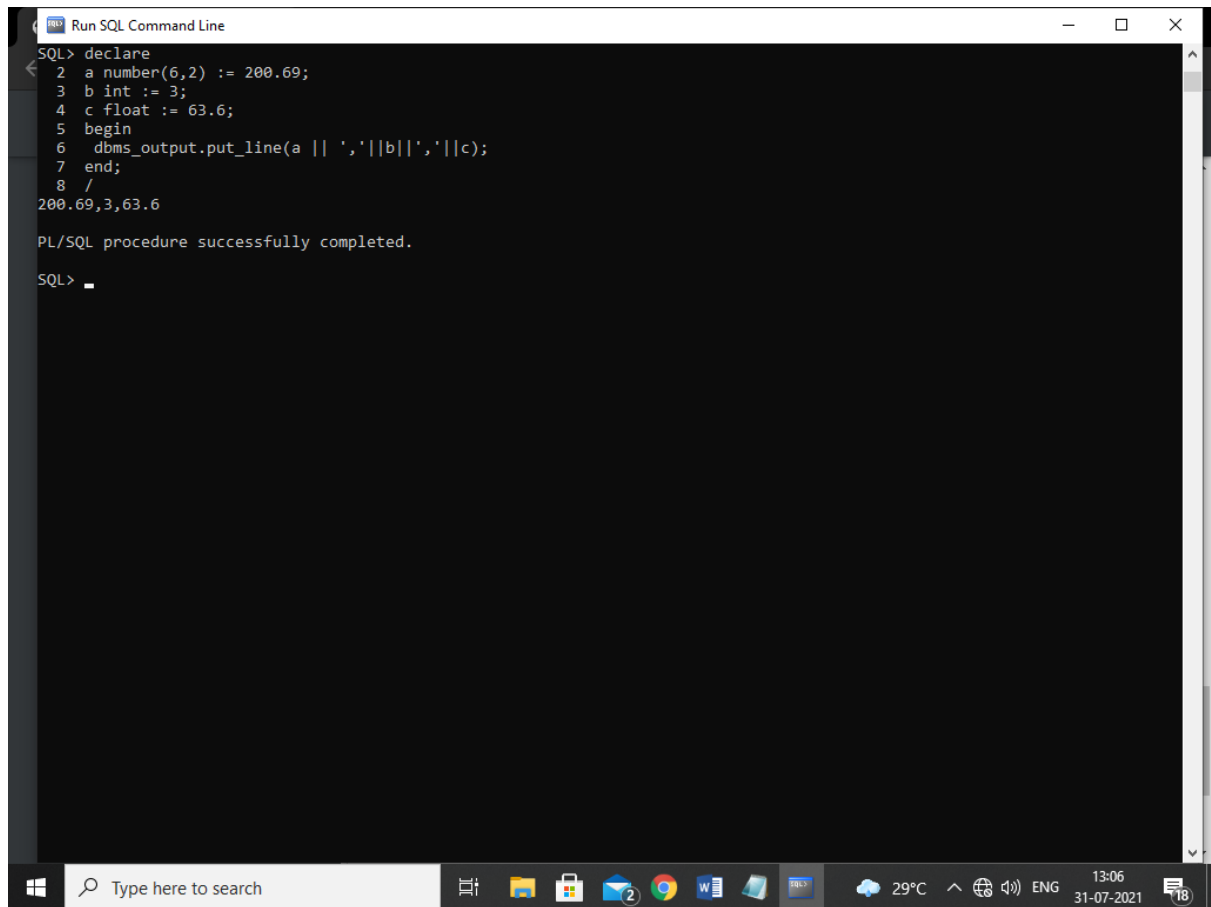


```
<SQL>
SQL> declare
2  b varchar(30) := 'hello Mehul';
3  begin
4  dbms_output.put_line(b);
5  end;
6  /
hello Mehul

PL/SQL procedure successfully completed.

SQL>
```

Number: This data type stores fixed or floating-point numbers up to 38 digits of precision. It is used to work with fields that will contain only numeric data. Syntax Variable number(8,2); Variable int; Variable float; Example:

A screenshot of a 'Run SQL Command Line' window. The window has a dark background with light-colored text. The text shows a PL/SQL script being executed. The script starts with 'SQL> declare', followed by line numbers 2 through 8. Line 2: 'a number(6,2) := 200.69;'. Line 3: 'b int := 3;'. Line 4: 'c float := 63.6;'. Line 5: 'begin'. Line 6: 'dbms_output.put_line(a || ','||b||','||c);'. Line 7: 'end;'. Line 8: '/'. Below the script, the output '200.69,3,63.6' is displayed. Then, the message 'PL/SQL procedure successfully completed.' is shown. The prompt 'SQL> ' is at the bottom. The window's title bar says 'Run SQL Command Line'. The Windows taskbar is visible at the bottom, showing the search bar, taskbar icons, and system tray with date and time (13:06, 31-07-2021).

Date time:

This data type stores the values in date format, as of date, month, and year. Whenever a variable is defined with DATE data type along with the date it can hold time information and by default time information is set to 12:00:00 if not specified.

Syntax: current_date DATE:=SYSDATE; Example:

```
Run SQL Command Line
SQL> declare
2  current_date date := sysdate;
3  begin
4  dbms_output.put_line(current_date);
5  end;
6  /
31-JUL-21
PL/SQL procedure successfully completed.
SQL> _
```

Windows taskbar: Type here to search, 29°C, 13:08, 31-07-2021