***PL/SQL***

1. *Write a PL/SQL program to find the factorial of a number.*

*SET SERVEROUTPUT ON;*

*DECLARE*

*FACT NUMBER:=1;*

*N NUMBER;*

*I NUMBER;*

*BEGIN*

*N:=&N;*

*FOR I IN 1..N*

*LOOP*

*N:=N\*I;*

*END LOOP;*

*dbms\_output.put\_line('FACTORIAL='||N);*

*END;*

*OUTPUT*

old 6: N:=&N;   
new 6: N:=3;   
FACTORIAL=18   
PL/SQL procedure successfully completed.

1. *Write a PL/SQL program to find the Fibonacci series.*

*SET SERVEROUTPUT ON;*

*DECLARE*

*FIRST NUMBER:=0;*

*SECOND NUMBER:=1;*

*THIRD NUMBER;*

*N NUMBER;*

*BEGIN*

*N:=&N;*

*DBMS\_OUTPUT.PUT\_LINE(FIRST);*

*DBMS\_OUTPUT.PUT\_LINE(SECOND);*

*FOR I IN 2..N*

*LOOP*

*THIRD:=FIRST+SECOND;*

*FIRST:=SECOND;*

*SECOND:=THIRD;*

*dbms\_output.put\_line(THIRD);*

*END LOOP;*

*END;*

OUTPUT

old 7: N:=&N;   
new 7: N:=5;   
0   
1   
1   
2   
3   
5   
PL/SQL procedure successfully completed.

1. *Create table student (id, name,m1, m2, m3, total, grade).Get one records of student. Find total and grade using Pl/SQL*

*CREATE TABLE STUDENT(*

*ID NUMBER,*

*M1 FLOAT,*

*M2 FLOAT,*

*M3 FLOAT,*

*TOTAL FLOAT,*

*GRADE VARCHAR(1));*

|  |  |  |
| --- | --- | --- |
| **Name** | **Null?** | **Type** |
| ID |  | NUMBER |
| M1 |  | FLOAT(126) |
| M2 |  | FLOAT(126) |
| M3 |  | FLOAT(126) |
| TOTAL |  | FLOAT(126) |
| GRADE |  | VARCHAR2(1) |

**CURSOR**

1. Create table student (id, name, m1, m2, m3, grade).Insert 5 tuples into it. Find the total, calculate grade and update the grade in the table.

**PROCEDURE & FUNCTION**

1. *Create table student (id, name, m1, m2, m3, total, grade).Create a function to calculate grade. Create a procedure to update the total and grade.*

**TRIGGER**

1. *Create table student(id, name mark). Create a trigger to inform the user that if he is entering a mark >300 that is invalid).*