**PL/SQL**

**Q1: Write a PL/SQL program to find the factorial of a given number**

declare

fact number:=1;

n number:=&n;

begin

while n>0

loop

fact:=fact\*n;

n:=n-1;

end loop;

dbms\_output.put\_line('Factorial = '||fact);

end;

/

**OUTPUT**

Enter value for n: 5

old 3: n number:=&n;

new 3: n number:=5;

Factorial = 120

**Q2: Write a PL/SQL program to check whether the given no is prime or not**

declare

flag number:=1;

n number:=&n;

begin

for i in 2..n/2

loop

if mod(n,i)=0

then

flag:=0;

end if;

end loop;

if flag=0

then

dbms\_output.put\_line(n||‘is Not Prime.’);

else

dbms\_output.put\_line(n||‘ is Prime.’);

end if;

end;

/

**OUTPUT**

Enter value for n: 2

old 3: n number:=&n;

new 3: n number:=2;

2 is Prime.

**Functions**

1. Write a PL/SQL program to Check whether a number is Armstrong or not using functions

declare

n number:=&n;

s number:=0;

r number;

len number;

temp number;

begin

temp:=n;

len:=length(to\_char(n));

while n>0

loop

r:=mod(n,10);

s:=s+power(r,len);

n:=trunc(n/10);

end loop;

if temp=s

then

dbms\_output.put\_line(temp||' is an armstrong number');

else

dbms\_output.put\_line(temp||' is not an armstrong number');

end if;

end;

**OUTPUT**

Enter value for n: 153

old 2: n number:=&n;

new 2: n number:=153;

153 is an armstrong number

1. **Create table that contains itemid,item\_name & price of several items sold in a grocery shop, Using functions retrieve the item name & price from table when itemid is given as input.**

create table item(itemid number primary key,item\_name varchar(25),price float);

insert into item values(1,pen,10);

insert into item values(2,pencil,20);

insert into item values(3,ruler,30);

insert into item values(4,'Biscute',40);

insert into item values(5,’Book’,50);

create or replace function display\_item\_details(id number)

return number as

p item.price%type;

n item.item\_name%type;

begin

select price,item\_name into p,n from item where itemid=id;

dbms\_output.put\_line('Name : '||n);

dbms\_output.put\_line('ITEM PRICE =  '||p);

return 0;

end;

/

declare

id number;

begin

id:=&itemid;

dbms\_output.put\_line(display\_item\_details(id));

end;

/

**Output**

Enter value for itemid: 1

old 4: id:=&itemid;

new 4: id:=1;

Name : pen

ITEM PRICE = 10

1. **Write a PL/SQL function called POW that takes two numbers as argument and return the value of the first number raised to the power of the second .**

create or replace function powr(a number,b number)

return number as

r number;

begin r:=power(a,b);

return r;

end;

/

declare

x number;

y number;

begin x:=&x;

y:=&y;

dbms\_output.put\_line('result='||powr(x,y));

end;

/

**Output**

Enter value for x: 3

old 4: begin x:=&x;

new 4: begin x:=3;

Enter value for y: 3

old 5: y:=&y;

new 5: y:=3;

result=27