**PL/SQL**

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

**Program**

declare

n number;

fact number:=1;

begin

n:=&n;

for i in 2..n

loop

fact:=fact\*i;

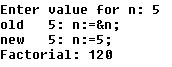
end loop;

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

end;

/

**Output**



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

**Program**

declare

n number;

i number;

flag number;

begin

i:=2;

flag:=1;

n:=&n;

for i in 2..n/2

loop

if n mod i=0

then

flag:=0;

exit;

end if;

end loop;

if flag=1

then

dbms\_output.put\_line('It is a prime number');

else

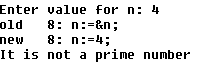
dbms\_output.put\_line('It is not a prime number');

end if;

end;

/

**Output**



**Functions**

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

**Program**

create or replace function armstr(x in number)

return number as

z number;

s number:=0;

r number;

l number;

n number;

begin

n:=x;

l:=length(n);

while n>0

loop

r:=mod(n,10);

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

n:=trunc(n/10);

end loop;

z:=s;

return z;

end;

declare

n number;

c number;

begin

n:=&n;

c:=armstr(n);

if c=n

then

dbms\_output.put\_line('Armstrong number');

else

dbms\_output.put\_line('Not Armstrong number');

end if;

end;

**Output**



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.

**Program**

create table item(item\_id varchar(20),item\_name varchar(20),price int);

insert into item values('p1','rice',30);

insert into item values('p2','wheat',65);

insert into item values('p3','egg',13);

insert into item values('p4','tomato',99);

insert into item values('p5','oil',110);

declare

id varchar(10);

begin

id:='&id';

dbms\_output.put\_line(getdata(id));

end;

create or replace function getdata(id varchar2)

return number as

p item.item\_name%type;

q item.price%type;

begin

select item\_name,price into p,q from item where item\_id=id;

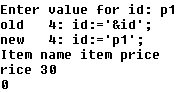
dbms\_output.put\_line('Item name item price');

dbms\_output.put\_line(p||' '||q);

return 0;

end;

**Output**



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.

**Program**

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**

