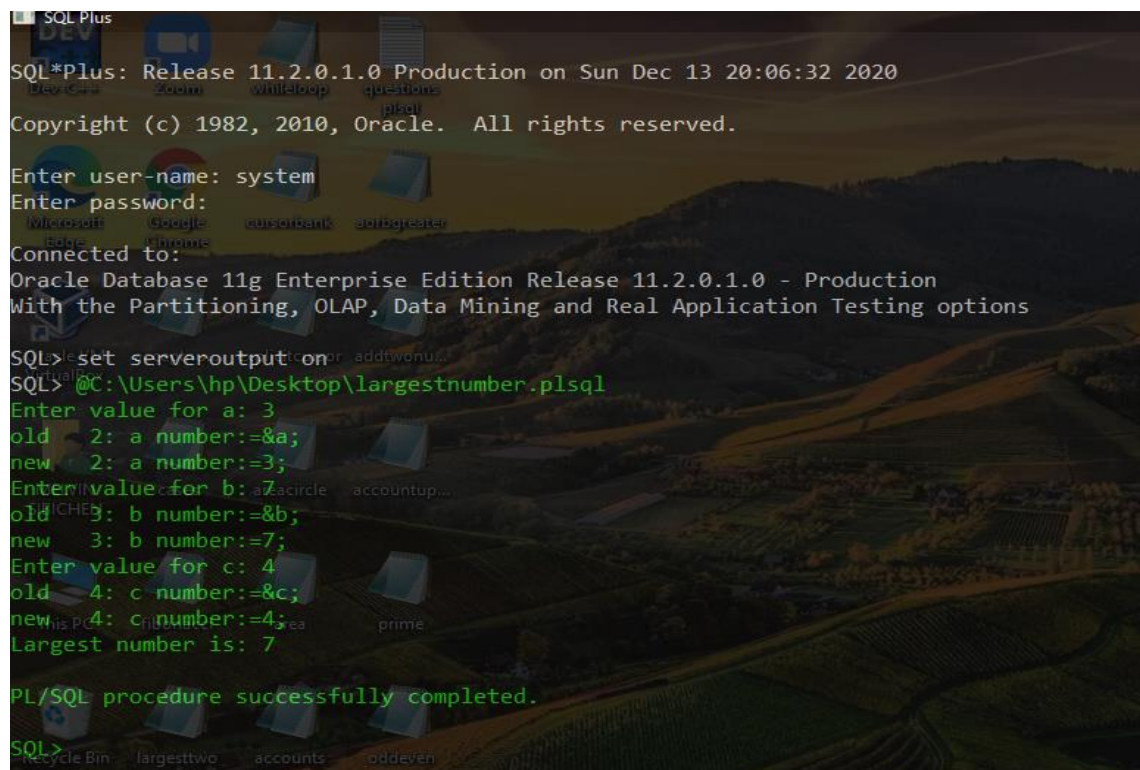


PL-SQL Written Assignment

Questions

1. Write a PL/SQL program to find the largest of three numbers.

```
declare
a number:=&a;
b number:=&b;
c number:=&c;
begin
if(a>b and a>c) then
dbms_output.put_line('Largest number is: '||a);
elsif(b>c) then
dbms_output.put_line('Largest number is: '||b);
else
dbms_output.put_line('Largest number is: '||c);
end if;
end;
/
```



The screenshot shows an SQL*Plus terminal window with a dark background and a landscape image. The text in the terminal is as follows:

```
SQL*Plus: Release 11.2.0.1.0 Production on Sun Dec 13 20:06:32 2020
Copyright (c) 1982, 2010, Oracle. All rights reserved.

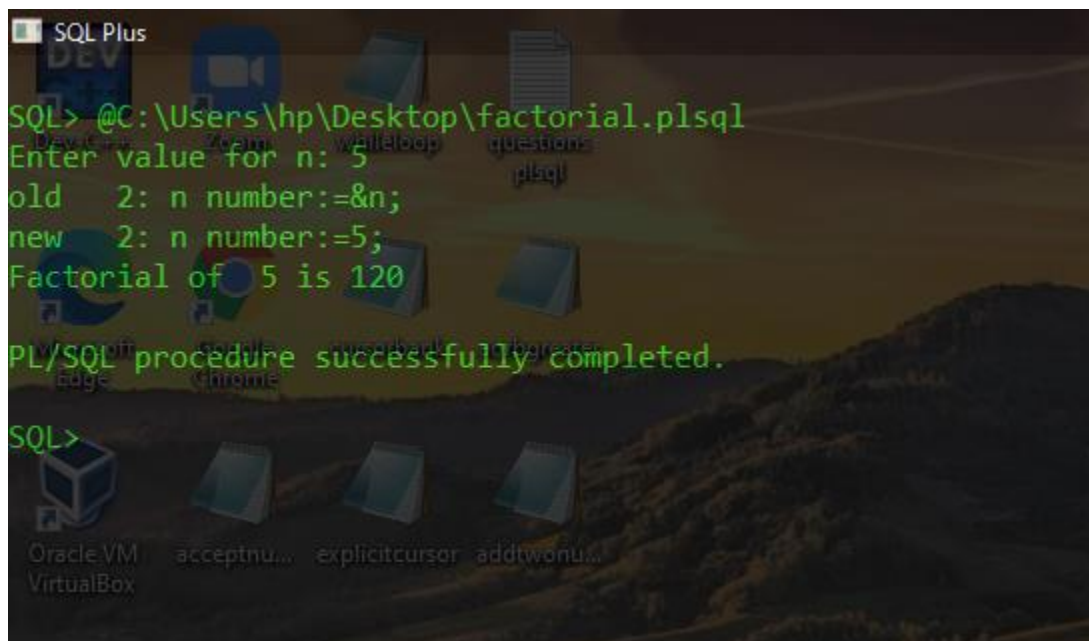
Enter user-name: system
Enter password:
Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> set serveroutput on
SQL> @C:\Users\hp\Desktop\largestnumber.plsql
Enter value for a: 3
old 2: a number:=&a;
new 2: a number:=3;
Enter value for b: 7
old 3: b number:=&b;
new 3: b number:=7;
Enter value for c: 4
old 4: c number:=&c;
new 4: c number:=4;
Largest number is: 7

PL/SQL procedure successfully completed.
SQL>
```

2. Write a PL/SQL program to find the factorial of a number using for loop.

```
declare
n number:=&n;
i number(10);
f number(10);
begin
f:=1;
for i in 1..n
loop
f:=f*i;
end loop;
dbms_output.put_line('Factorial of '||n|| ' is '||f);
end;
/
```



The screenshot shows a SQL Plus terminal window with a dark background and green text. The prompt is 'SQL>'. The user enters '@C:\Users\hp\Desktop\factorial.plsql'. The prompt changes to 'Enter value for n:'. The user enters '5'. The prompt changes to 'old 2: n number:=&n;'. The user enters '5'. The prompt changes to 'new 2: n number:=5;'. The output is 'Factorial of 5 is 120'. The prompt changes to 'PL/SQL procedure successfully completed.'. The user enters 'SQL>'. The background of the terminal window shows a desktop with various icons and a taskbar at the bottom.

```
SQL> @C:\Users\hp\Desktop\factorial.plsql
Enter value for n: 5
old 2: n number:=&n;
new 2: n number:=5;
Factorial of 5 is 120
PL/SQL procedure successfully completed.
SQL>
```

3. Write a PL/SQL program to find the sum of the first n natural numbers.

```
declare
n number:=&n;
s number(10);
i number(10);
begin
s:=0;
for i in 1..n
loop
s:=s+i;
end loop;
dbms_output.put_line('Sum of first ' ||n|| ' numbers is ' ||s );
end;
/
```

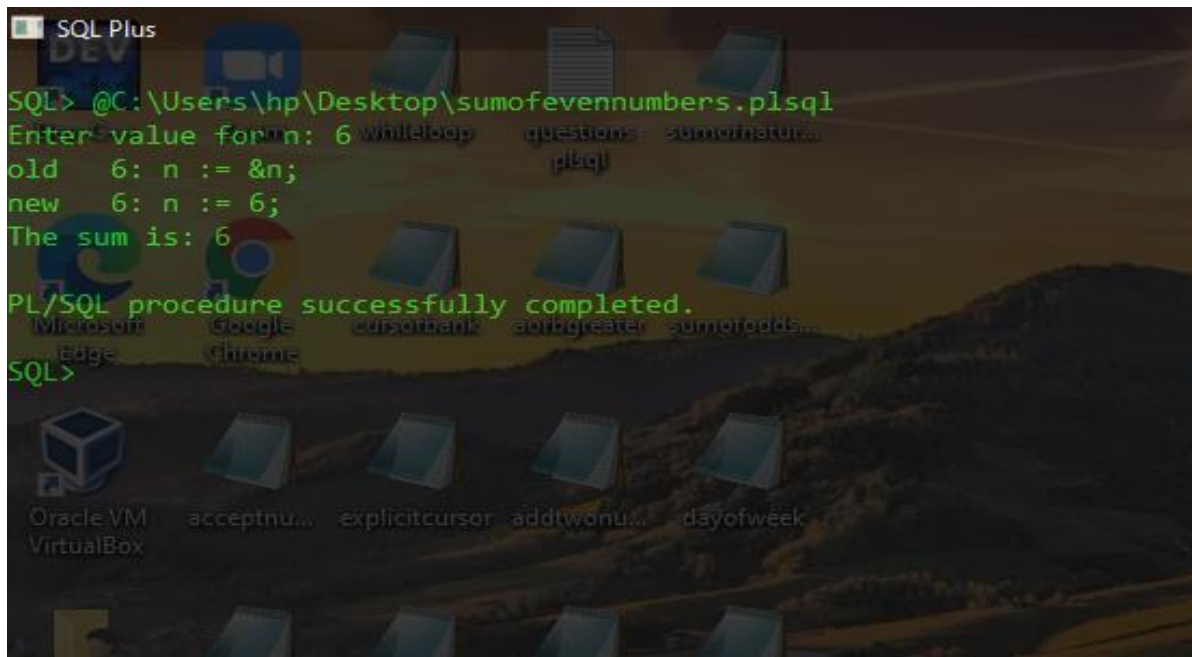


The screenshot shows a SQL Plus terminal window with a dark background and green text. The prompt is 'SQL>'. The user enters '@C:\Users\hp\Desktop\sumofnaturalnumber.plsql'. The prompt changes to 'Enter value for n:'. The user enters '12'. The prompt changes to 'old 2: n number:=&n;'. The user enters '12'. The prompt changes to 'new 2: n number:=12;'. The output is 'Sum of first 12 numbers is 78'. The prompt changes to 'PL/SQL procedure successfully completed.'. The prompt changes to 'SQL>'. The background of the terminal window shows a desktop with various icons and a landscape image.

```
SQL> @C:\Users\hp\Desktop\sumofnaturalnumber.plsql
Enter value for n: 12
old 2: n number:=&n;
new 2: n number:=12;
Sum of first 12 numbers is 78
PL/SQL procedure successfully completed.
SQL>
```

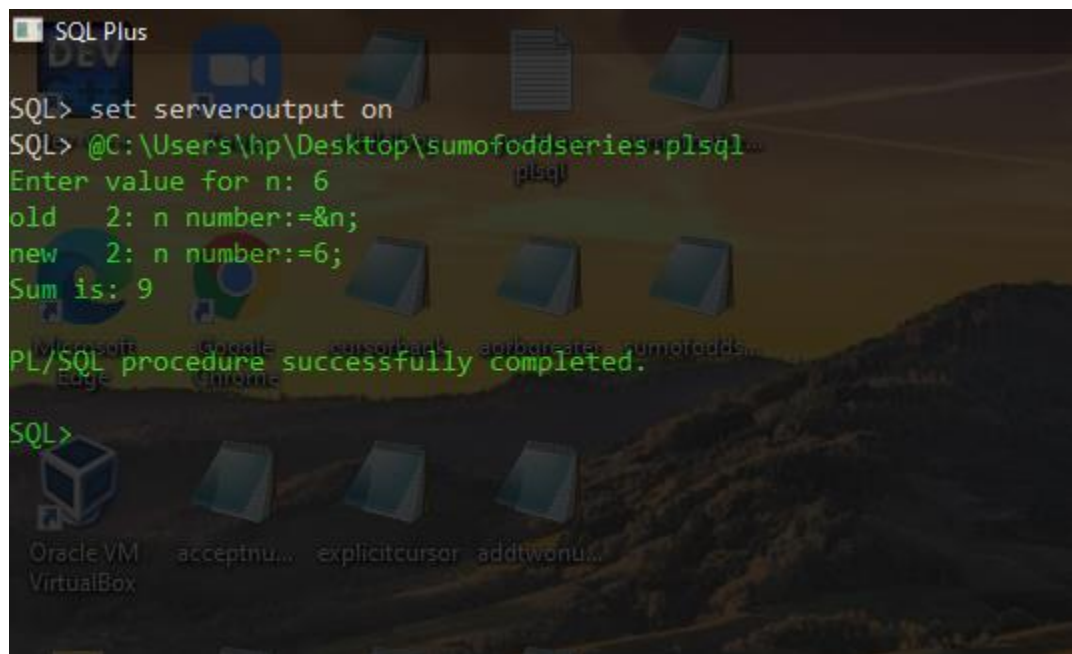
4. Write a PL/SQL program to find the sum of the even series of natural numbers using while loop.

```
declare
n number(10);
i number(10);
s number(10);
begin
n := &n;
i := 0;
s := 0;
while i != n
loop
if mod(i,2) = 0 then
s := s+i;
end if;
i := i+1;
end loop;
dbms_output.put_line('The sum is: '||s);
end;
/
```



5. Write a PL/SQL program to find the sum of the odd series of natural numbers.

```
declare
n number:=&n;
s number(10);
i number(10);
begin
s:=0;
for i in 1..n
loop
if(mod(i,2)<>0) then
s:=s+i;
end if;
end loop;
dbms_output.put_line('Sum is: '||s);
end;
/
```



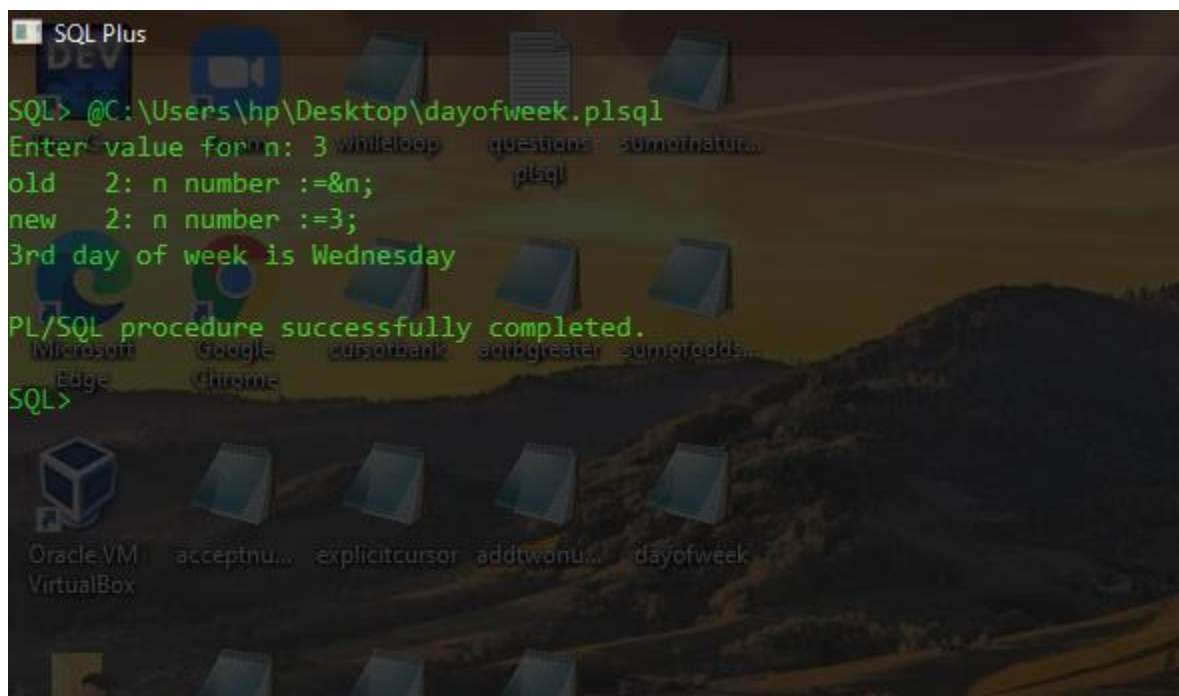
The screenshot shows a SQL Plus terminal window with the following text:

```
SQL> set serveroutput on
SQL> @C:\Users\hp\Desktop\sumofoddseries.plsql
Enter value for n: 6
old 2: n number:=&n;
new 2: n number:=6;
Sum is: 9
PL/SQL procedure successfully completed.
SQL>
```

The background of the terminal window shows a desktop environment with various icons and a landscape wallpaper.

6. Write a PL/SQL program to display the days of the week using the case structure.

```
declare
n number :=&n;
begin
case n
When 1 then
dbms_output.put_line('1st day of week is Monday');
When 2 then
dbms_output.put_line('2nd day of week is Tuesday');
When 3 then
dbms_output.put_line('3rd day of week is Wednesday');
When 4 then
dbms_output.put_line('4th day of week is Thursday');
When 5 then
dbms_output.put_line('5th day of week is Friday');
When 6 then
dbms_output.put_line('6th day of week is Saturday');
When 7 then
dbms_output.put_line('7th day of week is Sunday');
else
dbms_output.put_line('Invalid day');
end case;
end;
/
```



```
SQL Plus
SQL> @C:\Users\hp\Desktop\dayofweek.plsql
Enter value for n: 3
old 2: n number :=&n;
new 2: n number :=3;
3rd day of week is Wednesday
PL/SQL procedure successfully completed.
SQL>
```