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Q1] Hello World Program in PL/SQL

```
DECLARE
  message VARCHAR2(20) := 'Hello, World!';
BEGIN
  DBMS_OUTPUT.PUT_LINE(message);
END;
```

```
1  DECLARE
2  message VARCHAR2(20) := 'Hello, World!';
3  BEGIN
4  DBMS_OUTPUT.PUT_LINE(message);
5  END;
6
```

```
Statement processed.
Hello, World!
```

Q2] PL/SQL Program To Add Two Numbers

```
declare
x number(5);
y number(5);
z number(7);
begin
x:=10;
y:=20;
z:=x+y;
dbms_output.put_line('Sum is '||z);
end;
/
```

```
1  declare
2  x number(5);
3  y number(5);
4  z number(7);
5  begin
6  x:=10;
7  y:=20;
8  z:=x+y;
9  dbms_output.put_line('Sum is '||z);
10  end;
11  /
```

```
Statement processed.
Sum is 30
```

Q3] PL/SQL Program To Add Two Numbers

```
DECLARE
  num NUMBER := 13;
  is prime BOOLEAN := TRUE;
BEGIN
  IF num <= 1 THEN
    is prime := FALSE;
  ELSE
    FOR i IN 2..num-1 LOOP
      IF num mod i = 0 THEN
        is prime := FALSE;
        EXIT;
      END IF;
    END LOOP;
  END IF;
  IF is prime THEN
    DBMS_OUTPUT.PUT_LINE(num || ' is a prime number');
  ELSE
    DBMS_OUTPUT.PUT_LINE(num || ' is not a prime number');
  END IF;
END;
```

```
1 , DECLARE
      num NUMBER := 13;
      is prime BOOLEAN := TRUE;
4 BEGIN
     IF num <= 1 THEN
        is prime := FALSE;
    ELSE
       FOR i IN 2..num-1 LOOP
8
9
          IF num mod i = 0 THEN
            is_prime := FALSE;
10
11
           EXIT;
          END IF;
12
13
        END LOOP;
      END IF;
14
     IF is prime THEN
15 v
        DBMS_OUTPUT.PUT_LINE(num |  ' is a prime number');
16
17 ,
      ELSE
        DBMS_OUTPUT.PUT_LINE(num || ' is not a prime number');
18
19
      END IF;
20
    END;
21
```

Statement processed. Sum is 30

Q4] PL/SQL Program to Find Factorial of a Number

```
declare
num int:=5;
res int;
function fact(num IN int)
return int
AS
f int;
begin
f:=1;
for i in 1..num loop
   f:=f*i;
```

```
end loop;
return f;
end fact;
begin
dbms_output.put_line('FINDING FACTORIAL OF:'||num);
res:=fact(num);
dbms_output.put_line('FACTORIAL ='||res);
end;
```

```
1 declare
2 num int:=5;
3 res int;
4 v function fact(num IN int)
5 return int
6 AS
7 fint;
8 , begin
9 f:=1;
10 , for i in 1..num loop
11 f:=f*i;
12 end loop;
13 return f;
14 end fact;
15 begin
16 dbms_output.put_line
        ('FINDING FACTORIAL OF: | num);
17
18 res:=fact(num);
19 dbms_output.put_line
       ('FACTORIAL =' | res);
20
21
    end;
22
```

```
Statement processed.
FINDING FACTORIAL OF:5
FACTORIAL =120
```

Q5] PL/SQL Program to Print Table of a Number

```
DECLARE
  num CONSTANT INTEGER := 5;
BEGIN
  -- Print the multiplication table
  FOR i IN 1..10 LOOP
     DBMS_OUTPUT.PUT_LINE(num || ' x ' || i || ' = ' ||
num*i);
  END LOOP;
END;
```

```
1  DECLARE
2  num CONSTANT INTEGER := 5;
3  BEGIN
4  -- Print the multiplication table
5  FOR i IN 1..10 LOOP
6  DBMS_OUTPUT.PUT_LINE(num || ' x ' || i || ' = ' || num*i);
7  END LOOP;
8  END;
```

```
Statement processed.

5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
```