CSE2007 (DBMS) Lab-10

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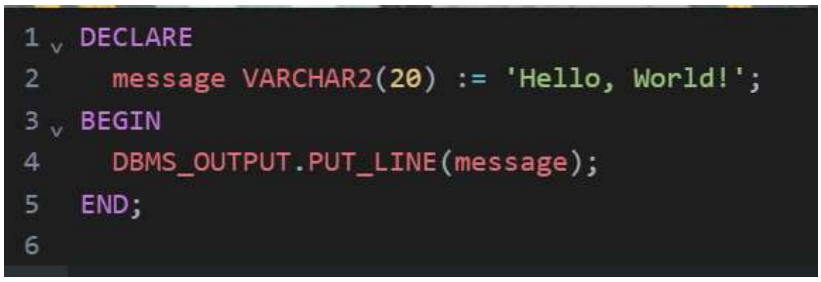
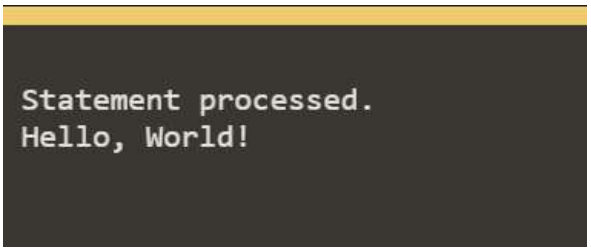
Q1] Hello World Program in PL/SQL

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





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;
/
```

```
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;
  /
```

```
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;
```

```
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;
```

```
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;
```

```
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;
```

```
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;
```

```
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;
```

```
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
```