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SQL> -- Question 1
SQL> -- Find a maximum between three numbers.
SQL> DECLARE
  2     a NUMBER;
  3     b NUMBER;
  4     c NUMBER;
  5     mx NUMBER;
  6 BEGIN
  7     a := &a;
  8     b := &b;
  9     c := &c;
10
11     IF a > b THEN
12         IF a > c THEN
13             mx := a;
14         ELSE
15             mx := c;
16         END IF;
17     ELSE
18         IF b > c THEN
19             mx := b;
20         ELSE
21             mx := c;
22         END IF;
23     END IF;
24
25     DBMS_OUTPUT.PUT_LINE('Max: ' || mx);
26 END;
27 /
```

Enter value for a: 20

```
old 7:      a := &a;
new 7:      a := 20;
Enter value for b: 10
old 8:      b := &b;
new 8:      b := 10;
Enter value for c: 30
old 9:      c := &c;
new 9:      c := 30;
Max: 30
```

PL/SQL procedure successfully completed.

```
SQL> -- Question 2
SQL> -- Check whether a number is divisible by 5 and 11 or not.
SQL> DECLARE
2      a NUMBER;
3  BEGIN
4      a := &a;
5
6      IF MOD(a, 5) = 0 AND MOD(a, 11) = 0 THEN
7          DBMS_OUTPUT.PUT_LINE('Divisible by 5 and 11');
8      ELSE
9          DBMS_OUTPUT.PUT_LINE('Not divisible by 5 and 11');
10     END IF;
11 END;
12 /
Enter value for a: 55
old 4:      a := &a;
new 4:      a := 55;
Divisible by 5 and 11
```

PL/SQL procedure successfully completed.

SQL> -- Question 2

SQL> -- Check whether a number is divisible by 5 and 11 or not.

SQL> DECLARE

2 a NUMBER;

3 BEGIN

4 a := &a;

5

6 IF MOD(a, 5) = 0 AND MOD(a, 11) = 0 THEN

7 DBMS_OUTPUT.PUT_LINE('Divisible by 5 and 11');

8 ELSE

9 DBMS_OUTPUT.PUT_LINE('Not divisible by 5 and 11');

10 END IF;

11 END;

12 /

Enter value for a: 47

old 4: a := &a;

new 4: a := 47;

Not divisible by 5 and 11

PL/SQL procedure successfully completed.

SQL> -- Question 3

SQL> -- Find the area of rectangle, triangle, and square.

SQL> DECLARE

2 length NUMBER;

3 breadth NUMBER;

4 base NUMBER;

```

5      height NUMBER;
6      side NUMBER;
7      area NUMBER;
8  BEGIN
9      DBMS_OUTPUT.PUT_LINE('1. Rectangle');
10     length := &length;
11     breadth := &breadth;
12     area := length * breadth;
13     DBMS_OUTPUT.PUT_LINE('Area: ' || area);
14
15     DBMS_OUTPUT.PUT_LINE('2. Triangle');
16     base := &base;
17     height := &height;
18     area := 0.5 * base * height;
19     DBMS_OUTPUT.PUT_LINE('Area: ' || area);
20
21     DBMS_OUTPUT.PUT_LINE('3. Square');
22     side := &side;
23     area := side * side;
24     DBMS_OUTPUT.PUT_LINE('Area: ' || area);
25 END;
26 /

```

Enter value for length: 3

old 10: length := &length;

new 10: length := 3;

Enter value for breadth: 5

old 11: breadth := &breadth;

new 11: breadth := 5;

Enter value for base: 8

old 16: base := &base;

```
new 16:      base := 8;
Enter value for height: 4
old 17:      height := &height;
new 17:      height := 4;
Enter value for side: 7
old 22:      side := &side;
new 22:      side := 7;
```

1. Rectangle

Area: 15

2. Triangle

Area: 16

3. Square

Area: 49

PL/SQL procedure successfully completed.

SQL> DECLARE

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 2      phy NUMBER;
 3      chem NUMBER;
 4      bio NUMBER;
 5      math NUMBER;
 6      comp NUMBER;
 7      perc NUMBER;
 8  BEGIN
 9      phy := &phy;
10      chem := &chem;
11      bio := &bio;
12      math := &math;
13      comp := &comp;
14
```

```
15      perc := (phy + chem + bio + math + comp) / 5;
16
17      IF perc >= 90 THEN
18          DBMS_OUTPUT.PUT_LINE('Grade: A');
19      ELSIF perc >= 80 THEN
20          DBMS_OUTPUT.PUT_LINE('Grade: B');
21      ELSIF perc >= 70 THEN
22          DBMS_OUTPUT.PUT_LINE('Grade: C');
23      ELSIF perc >= 60 THEN
24          DBMS_OUTPUT.PUT_LINE('Grade: D');
25      ELSIF perc >= 40 THEN
26          DBMS_OUTPUT.PUT_LINE('Grade: E');
27      ELSE
28          DBMS_OUTPUT.PUT_LINE('Grade: F');
29      END IF;
30  END;
31  /
```

Enter value for phy: 74

old 9: phy := &phy;

new 9: phy := 74;

Enter value for chem: 83

old 10: chem := &chem;

new 10: chem := 83;

Enter value for bio: 93

old 11: bio := &bio;

new 11: bio := 93;

Enter value for math: 89

old 12: math := &math;

new 12: math := 89;

Enter value for comp: 99

```
old 13:      comp := &comp;
new 13:      comp := 99;
Grade: B
```

PL/SQL procedure successfully completed.

```
SQL> -- Question 5
SQL> -- Find sum of 100 natural number using loop.
SQL> DECLARE
  2      i NUMBER;
  3      numsum NUMBER;
  4  BEGIN
  5      i := 1;
  6      numsum := 0;
  7
  8      WHILE i <= 100 LOOP
  9          numsum := numsum + i;
10          i := i + 1;
11      END LOOP;
12
13      DBMS_OUTPUT.PUT_LINE('Sum: ' || numsum);
14  END;
15  /
Sum: 5050
```

PL/SQL procedure successfully completed.

```
SQL> -- Question 6
SQL> CREATE TABLE empinfo (id NUMBER, name VARCHAR2(20), age NUMBER, address VARCHAR2(20), salary NUMBER);
```

Table created.

SQL>

SQL> INSERT INTO empinfo VALUES (1, 'Ramesh', 32, 'Ahmedabad', 2000);

1 row created.

SQL> INSERT INTO empinfo VALUES (2, 'Khilan', 25, 'Delhi', 1500);

1 row created.

SQL> INSERT INTO empinfo VALUES (3, 'kaushik', 23, 'Kota', 2000);

1 row created.

SQL> INSERT INTO empinfo VALUES (4, 'Chaitali', 25, 'Mumbai', 6500);

1 row created.

SQL> INSERT INTO empinfo VALUES (5, 'Hardik', 27, 'Bhopal', 8500);

1 row created.

SQL> INSERT INTO empinfo VALUES (6, 'Komal', 22, 'MP', 4500);

1 row created.

SQL>

SQL> ALTER TABLE empinfo ADD CONSTRAINT empinfo_pk PRIMARY KEY (id);

Table altered.

SQL> -- Question 6.A

SQL> -- Find the name of person having id =1

SQL> DECLARE

2 e_id empinfo.id%TYPE := 1;

3 e_name empinfo.name%TYPE;

4 BEGIN

5 SELECT name INTO e_name FROM empinfo WHERE id = e_id;

6 DBMS_OUTPUT.PUT_LINE('The name of person having id=' || e_id || ' is ' || e_name);

7 END;

8 /

The name of person having id=1 is Ramesh

PL/SQL procedure successfully completed.

SQL> -- Question 6.B

SQL> -- Find the name, age, salary lives in kota.

SQL> DECLARE

2 e_city empinfo.address%TYPE := 'Kota';

3 e_name empinfo.name%TYPE;

4 e_age empinfo.age%TYPE;

5 e_salary empinfo.salary%TYPE;

6 BEGIN

7 SELECT name, age, salary INTO e_name, e_age, e_salary

8 FROM empinfo WHERE address = e_city;

9 DBMS_OUTPUT.PUT_LINE('The name, age, salary who lives in '

10 || e_city || ' is ' || e_name || ', ' || e_age || ', ' || e_salary);

11 END;

12 /

The name, age, salary who lives in Kota is kaushik, 23, 2000

PL/SQL procedure successfully completed.

SQL>