Exercise 6   Statements

Develop a program that includes the features of nested if-case and case expression. The program can be extended using the null if and coalesce functions.

Objective: the objective of this program is to use nested if case, case expressions and null if .

SOURCE CODE:

NESTED IF:

```
DECLARE
sno NUMBER(3):=&sno;
sname VARCHAR2(20):='&sname';
m1 NUMBER(3):=&m1;
m2 NUMBER(3):=&m2;
m3 NUMBER(3):=&m3;
total NUMBER(4);
avg1 NUMBER(5,2);
class VARCHAR(30);
BEGIN
total:=m1+m2+m3;
avg1:=total/3;
if m1>35 AND m2>35 AND m3>35 then
if avg1>60 then
class:='first class';
end if;
if avg1>50 AND avg1<60 then
class:='second class';
end if;
if avg1>40 AND avg1<50 then
class:='third class';
end if;
else
class:='fail';
end if;
```

insert into student(sno,sname,m1,m2,m3,total,avg1,class);
END;

Expected Output:
Enter value for sno:15
Old 3:sno NUMBER(3):=&sno;
New 3: sno NUMBER (3):=15;
Enter value for sname:ram
Old 4:sname VARCHAR(20):='&sname';
New 4:sname VARCHAR (20):=ram;
Enter value for m1:40
Old 5:m1 NUMBER(3):=&m1;
New 5:m1 NUMBER(3):=40;
Enter value for m2:55
Old 6:m2 NUMBER(3):=&m2;
New 6:m2 NUMBER(3):=55;
Enter value for m3:68
Old 7:m3 NUMBER(3):=&m3;
New 7:m3 NUMBER(3):=68;
Enter value for sno:26
Enter value for sname:manju
Enter value for m1:56
Enter value for m2:84
Enter value for m3:62
Enter value for total:202
Enter value for avg1:67.33
Enter value for class:first class
PL/SQL procedure successfully completed.

NULLIF;

DECLARE
v_num NUMBER:=&sv_user_num;
v_remainder NUMBER;
BEGIN
---------calculate the remainder and if it is zero

return a NULL v_remainder:=NULLIF(MOD(v_num,2),0);
DBMS_OUTPUT.PUT_LINE('v_remainder:'||v_remainder);
END;

Expected Output:
SQL>@nullif.sql;
9
Enter value for sv_user_num:26
Old 3:v_num NUMBER:=&sv_user_num;
New 3:v_num NUMBER:=26;
V_remainder:1
PL/SQL procedure successfully completed.

CASE:

DECLARE
v_num1 NUMBER:=&sv_num1;
v_num2 NUMBER:=&sv_num2;
v_num3 NUMBER:=&sv_num3;
v_result NUMBER;
v_result:=CASE
WHEN v_num1 IS NOT NULL THEN v_num1
ELSE
CASE
WHEN v_num2 IS NOT NULL THEN v_num2
ELSE v_num3
END
END;
DBMS_OUTPUT.PUT_LINE('RESULT:'||v_result);
END;

Expected Output:
SQL>@case.sql;
17
Enter value for sv_ num1:12
Old 2:v_num1 NUMBER:&sv_num1;

New 2:v_num1 NUMBER:12;
Enter value for sv_num2:13
Old 3:v_num2 NUMBER:&sv_num2;
New 3:v_num2 NUMBER:13;
Enter value for sv_num3:15
Old 4:v_num3 NUMBER:&sv_num3;
New 4:v_num3 NUMBER:15;
RESULT:12
PL/SQL procedure successfully completed.

COALESCE:

```
DECLARE
v_num1 NUMBER:=&sv_num1;
v_num2 NUMBER:=&sv_num2;
v_num3 NUMBER:=&sv_num3;
v_result NUMBER;
BEGIN
v_result:=COALESCE(v_num1,v_num2,v_num3);
DBMS_OUTPUT.PUT_LINE('RESULT:'||v_result);
END;
```

Expected Output:
SQL>@coal.sql;
10
Enter value for sv_ num1:45
Old 2:v_num1 NUMBER: &sv_num1;
New 2:v_num1 NUMBER: 45;
Enter value for sv_num2:23
Old 3:v_num2 NUMBER: &sv_num2;
New 3:v_num2 NUMBER: 23;
Enter value for sv_num3:15
Old 4:v_num3 NUMBER: &sv_num3;
New 4:v_num3 NUMBER: 15;
RESULT: 45
PL/SQL procedure successfully completed.