Nom : Benayhya

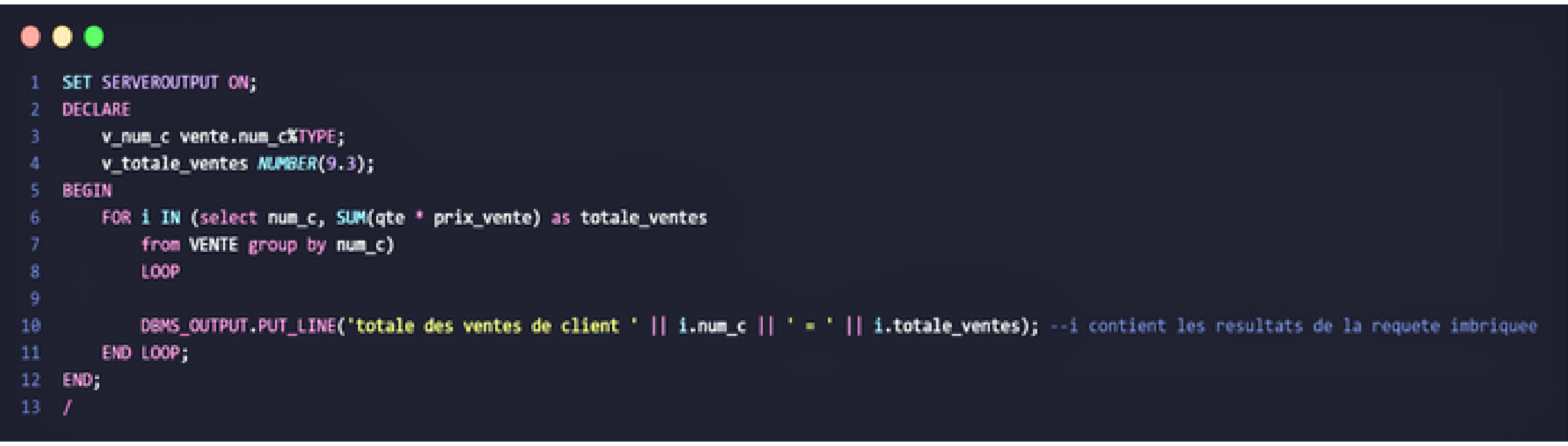
Prenom : Othman

Filiere : Genie informatique 2

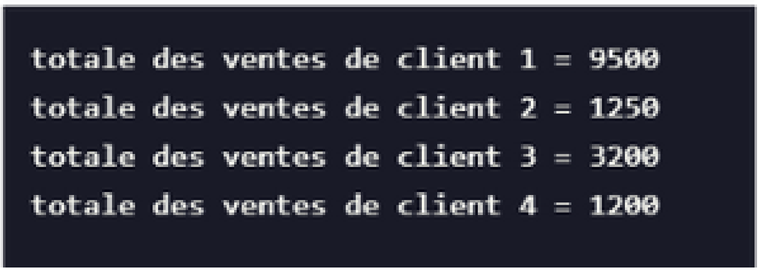
Numero : 11

TP1_PL/SQL

Exercice 1 : Calculer le total des ventes pour chaque client

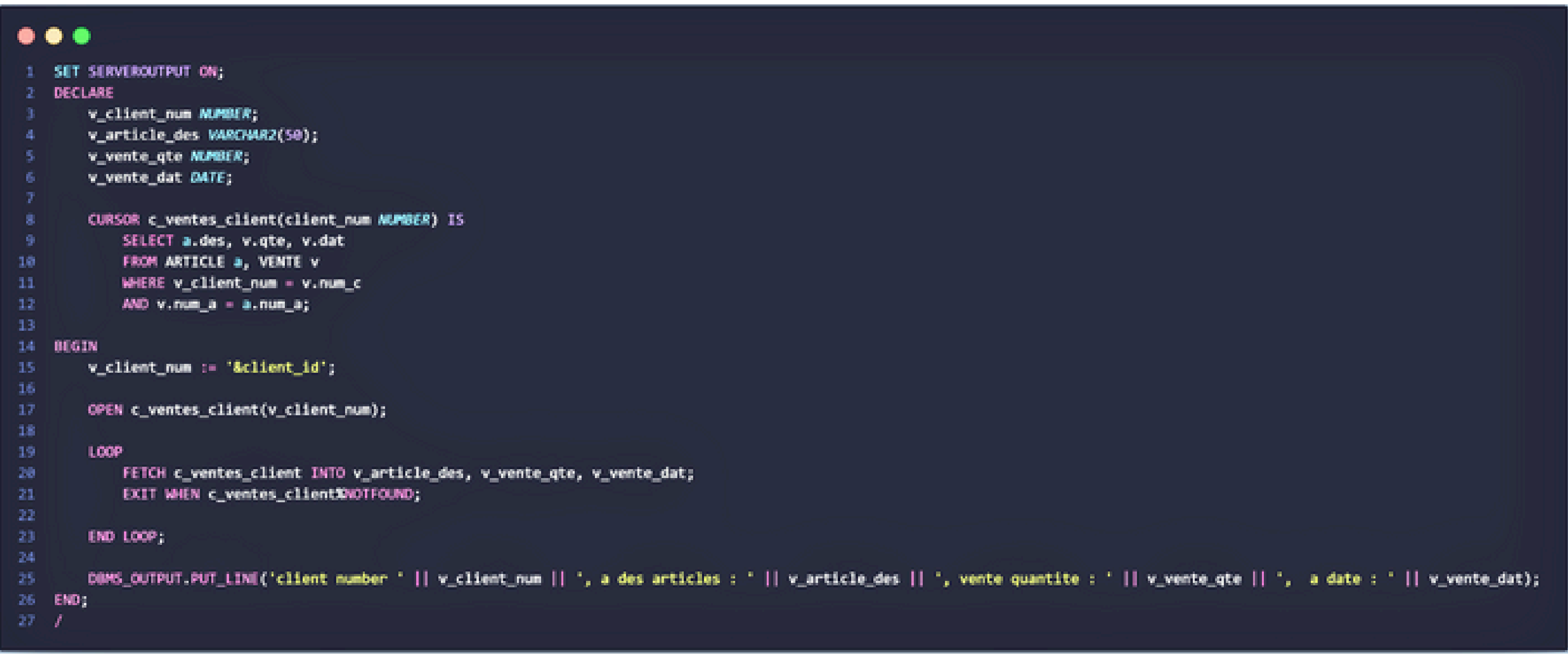


```
SET SERVEROUTPUT ON;
DECLARE
    v_num_c vente.num_c%TYPE;
    v_totale_ventes NUMBER(9.3);
BEGIN
    FOR i IN (select num_c, SUM(qte * prix_vente) as totale_ventes
        from VENTE group by num_c)
        LOOP

        DBMS_OUTPUT.PUT_LINE('totale des ventes de client ' || i.num_c || ' = ' || i.totale_ventes); --i contient les resultats de la requete imbriquee
    END LOOP;
END;
/
```

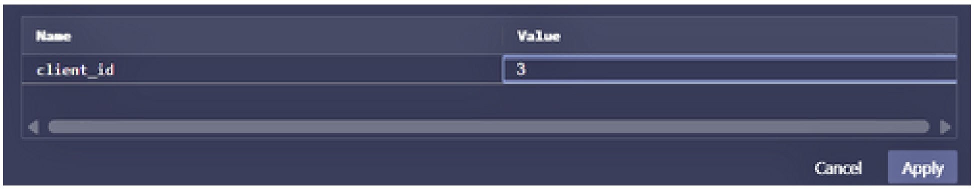


```
totale des ventes de client 1 = 9500
totale des ventes de client 2 = 1250
totale des ventes de client 3 = 3200
totale des ventes de client 4 = 1200
```

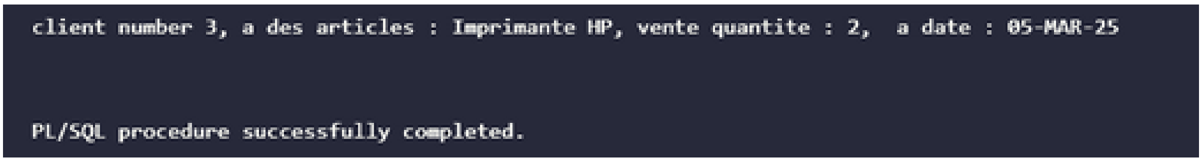
Exercice 2 : Afficher les articles vendus à un client spécifique



```sql
SET SERVEROUTPUT ON;
DECLARE
    v_client_num NUMBER;
    v_article_des VARCHAR2(50);
    v_vente_qte NUMBER;
    v_vente_dat DATE;

    CURSOR c_ventes_client(client_num NUMBER) IS
        SELECT a.des, v.qte, v.dat
        FROM ARTICLE a, VENTE v
        WHERE v_client_num = v.num_c
        AND v.num_a = a.num_a;

BEGIN
    v_client_num := '&client_id';

    OPEN c_ventes_client(v_client_num);

    LOOP
        FETCH c_ventes_client INTO v_article_des, v_vente_qte, v_vente_dat;
        EXIT WHEN c_ventes_client%NOTFOUND;

    END LOOP;

    DBMS_OUTPUT.PUT_LINE('client number ' || v_client_num || ', a des articles : ' || v_article_des || ', vente quantite : ' || v_vente_qte || ',  a date : ' || v_vente_dat);
END;
/
```

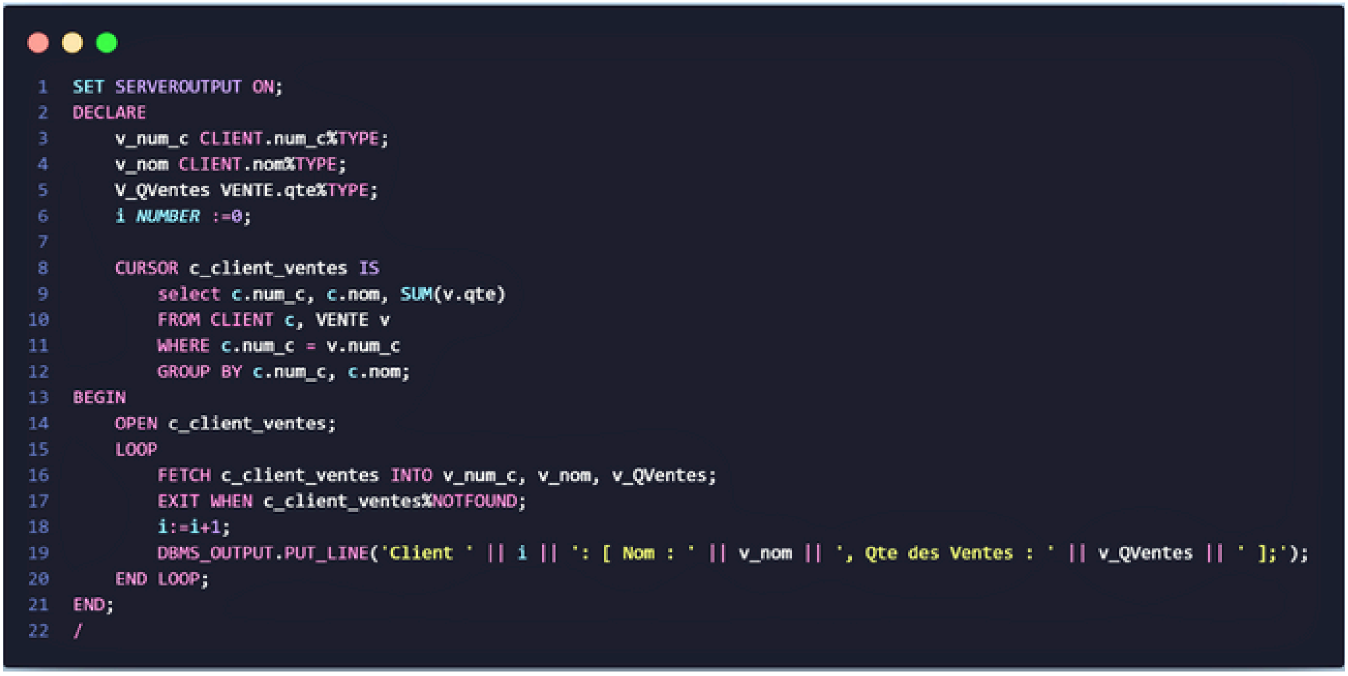


Name	Value
client_id	3

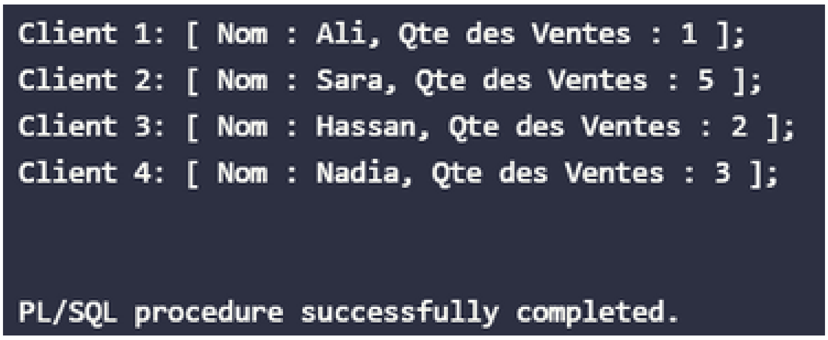


```
client number 3, a des articles : Imprimante HP, vente quantite : 2,  a date : 05-MAR-25


PL/SQL procedure successfully completed.
```

Exercice 3 : Lister les clients avec leurs ventes

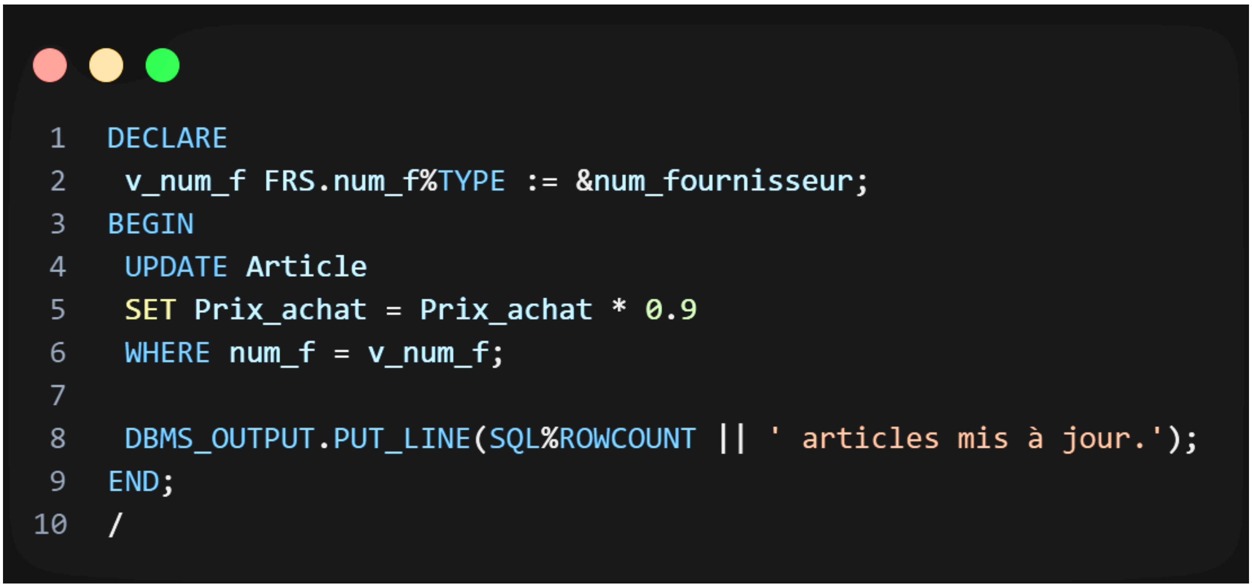


```
SET SERVEROUTPUT ON;
DECLARE
    v_num_c CLIENT.num_c%TYPE;
    v_nom CLIENT.nom%TYPE;
    V_QVentes VENTE.qte%TYPE;
    i NUMBER :=0;

    CURSOR c_client_ventes IS
        select c.num_c, c.nom, SUM(v.qte)
        FROM CLIENT c, VENTE v
        WHERE c.num_c = v.num_c
        GROUP BY c.num_c, c.nom;
BEGIN
    OPEN c_client_ventes;
    LOOP
        FETCH c_client_ventes INTO v_num_c, v_nom, v_QVentes;
        EXIT WHEN c_client_ventes%NOTFOUND;
        i:=i+1;
        DBMS_OUTPUT.PUT_LINE('Client ' || i || ': [ Nom : ' || v_nom || ', Qte des Ventes : ' || v_QVentes || ' ];');
    END LOOP;
END;
/
```

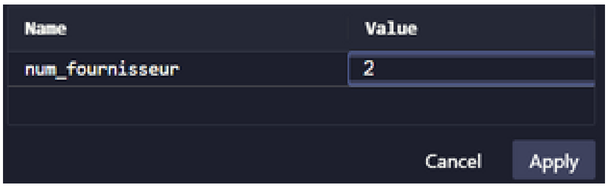


```
Client 1: [ Nom : Ali, Qte des Ventes : 1 ];
Client 2: [ Nom : Sara, Qte des Ventes : 5 ];
Client 3: [ Nom : Hassan, Qte des Ventes : 2 ];
Client 4: [ Nom : Nadia, Qte des Ventes : 3 ];



PL/SQL procedure successfully completed.
```

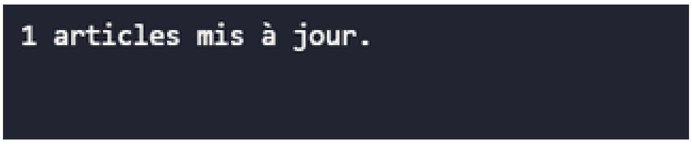
Exercice 4 : Mettre à jour le prix des articles selon le fournisseur



```
DECLARE
 v_num_f FRS.num_f%TYPE := &num_fournisseur;
BEGIN
 UPDATE Article
 SET Prix_achat = Prix_achat * 0.9
 WHERE num_f = v_num_f;

 DBMS_OUTPUT.PUT_LINE(SQL%ROWCOUNT || ' articles mis à jour.');
END;
/
```

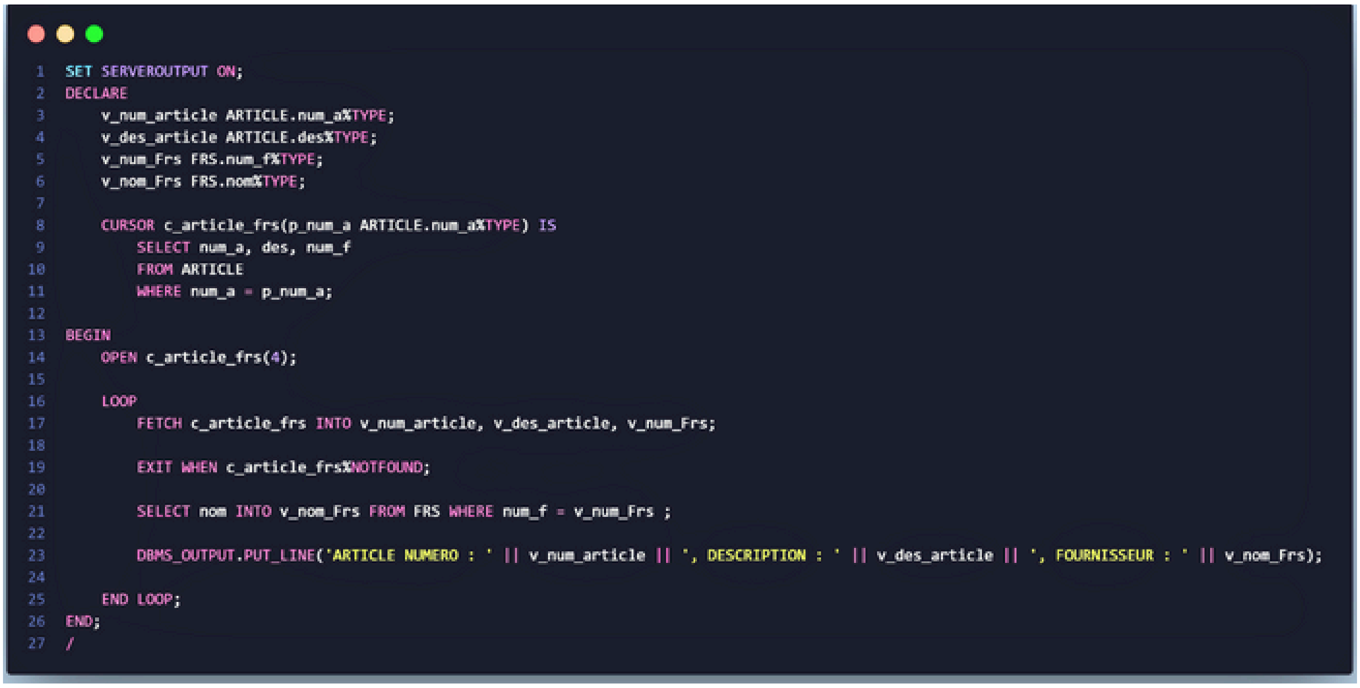


Name	Value
num_fournisseur	2

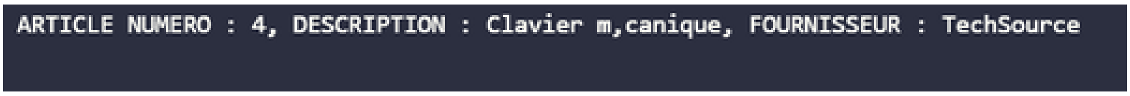


```
1 articles mis à jour.
```

Exercice 5 : Trouver les fournisseurs par article

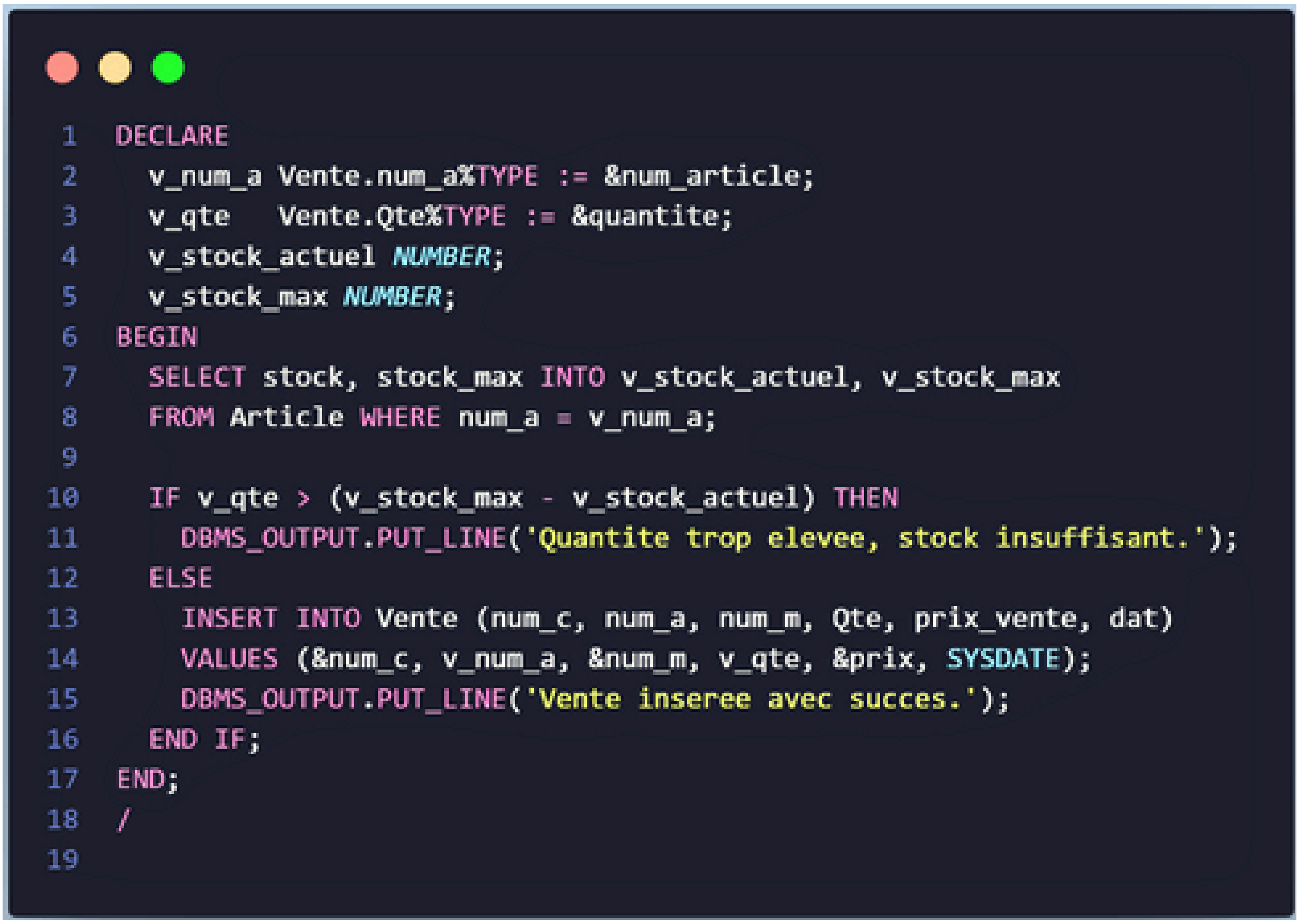


```
SET SERVEROUTPUT ON;
DECLARE
    v_num_article ARTICLE.num_a%TYPE;
    v_des_article ARTICLE.des%TYPE;
    v_num_Frs FRS.num_f%TYPE;
    v_nom_Frs FRS.nom%TYPE;

    CURSOR c_article_frs(p_num_a ARTICLE.num_a%TYPE) IS
        SELECT num_a, des, num_f
        FROM ARTICLE
        WHERE num_a = p_num_a;

BEGIN
    OPEN c_article_frs(4);

    LOOP
        FETCH c_article_frs INTO v_num_article, v_des_article, v_num_Frs;

        EXIT WHEN c_article_frs%NOTFOUND;

        SELECT nom INTO v_nom_Frs FROM FRS WHERE num_f = v_num_Frs ;

        DBMS_OUTPUT.PUT_LINE('ARTICLE NUMERO : ' || v_num_article || ', DESCRIPTION : ' || v_des_article || ', FOURNISSEUR : ' || v_nom_Frs);

    END LOOP;
END;
/
```

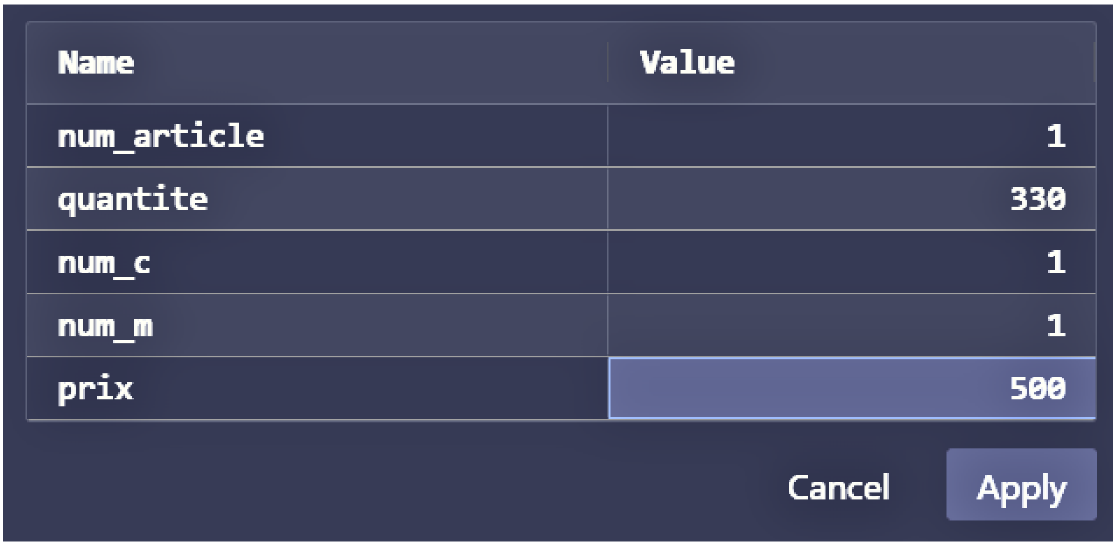


```
ARTICLE NUMERO : 4, DESCRIPTION : Clavier m,canique, FOURNISSEUR : TechSource
```

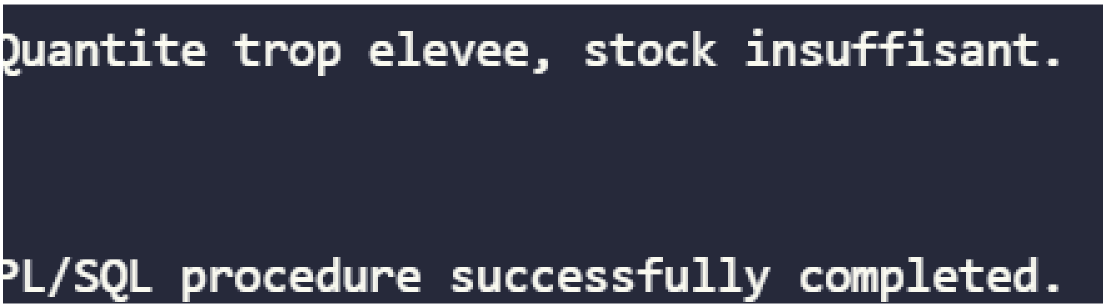
Exercice 6 : Vérifier la disponibilité des articles lors d'une vente



```sql
DECLARE
  v_num_a Vente.num_a%TYPE := &num_article;
  v_qte   Vente.Qte%TYPE := &quantite;
  v_stock_actuel NUMBER;
  v_stock_max NUMBER;
BEGIN
  SELECT stock, stock_max INTO v_stock_actuel, v_stock_max
  FROM Article WHERE num_a = v_num_a;

  IF v_qte > (v_stock_max - v_stock_actuel) THEN
    DBMS_OUTPUT.PUT_LINE('Quantite trop elevee, stock insuffisant.');
  ELSE
    INSERT INTO Vente (num_c, num_a, num_m, Qte, prix_vente, dat)
    VALUES (&num_c, v_num_a, &num_m, v_qte, &prix, SYSDATE);
    DBMS_OUTPUT.PUT_LINE('Vente inseree avec succes.');
  END IF;
END;
/
```

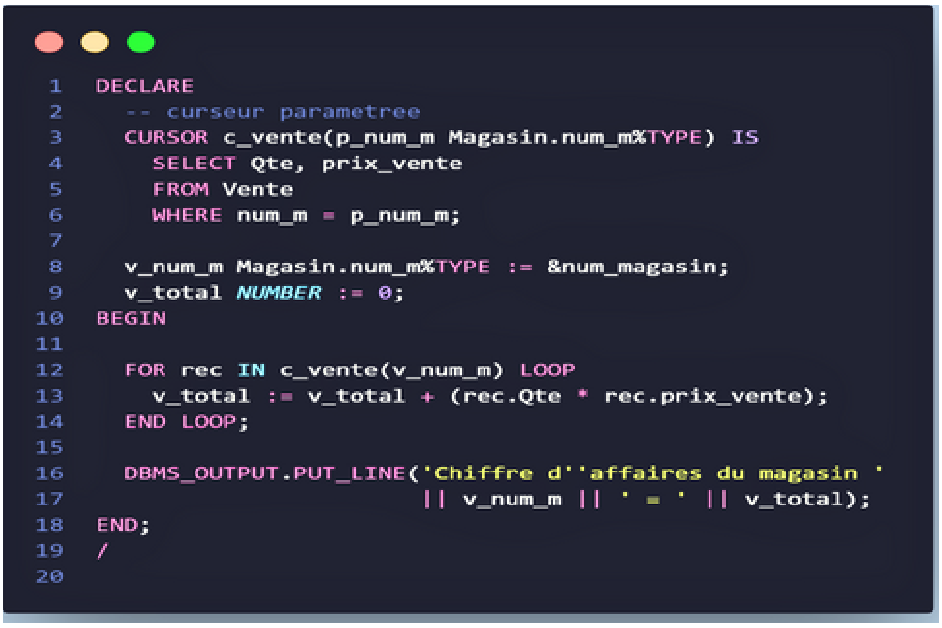


Name	Value
num_article	1
quantite	330
num_c	1
num_m	1
prix	500

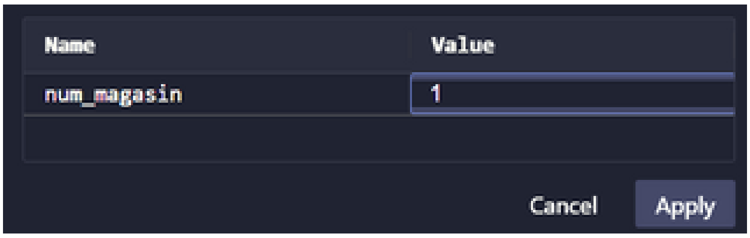


```
Quantite trop elevee, stock insuffisant.


PL/SQL procedure successfully completed.
```

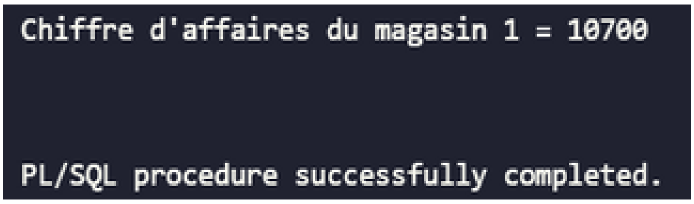
Exercice 7 : Calculer le chiffre d’affaires total d’un magasin



```sql
DECLARE
  -- curseur parametree
  CURSOR c_vente(p_num_m Magasin.num_m%TYPE) IS
    SELECT Qte, prix_vente
    FROM Vente
    WHERE num_m = p_num_m;

  v_num_m Magasin.num_m%TYPE := &num_magasin;
  v_total NUMBER := 0;
BEGIN

  FOR rec IN c_vente(v_num_m) LOOP
    v_total := v_total + (rec.Qte * rec.prix_vente);
  END LOOP;

  DBMS_OUTPUT.PUT_LINE('Chiffre d''affaires du magasin '
                       || v_num_m || ' = ' || v_total);
END;
/
```

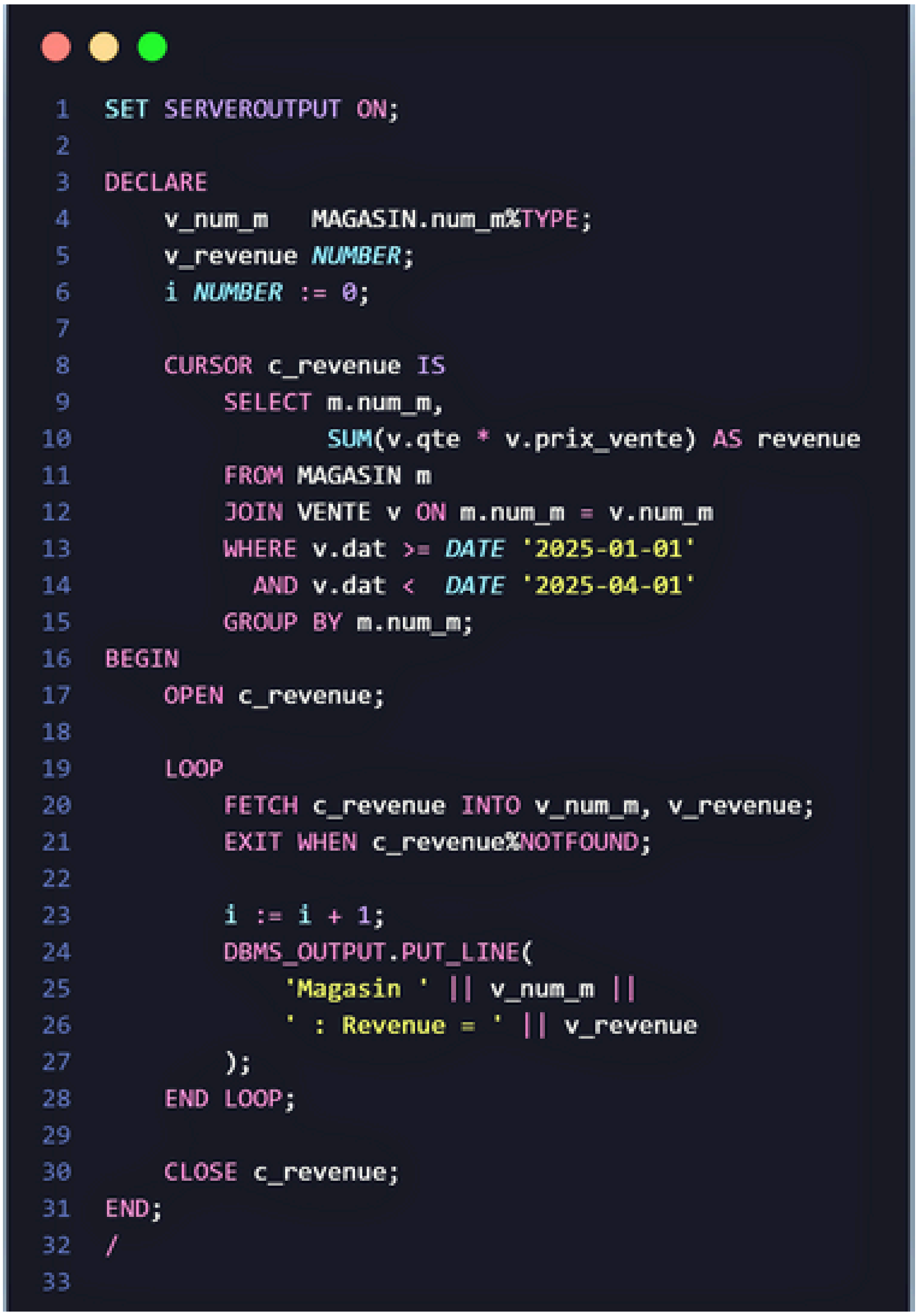


Name	Value
num_magasin	1

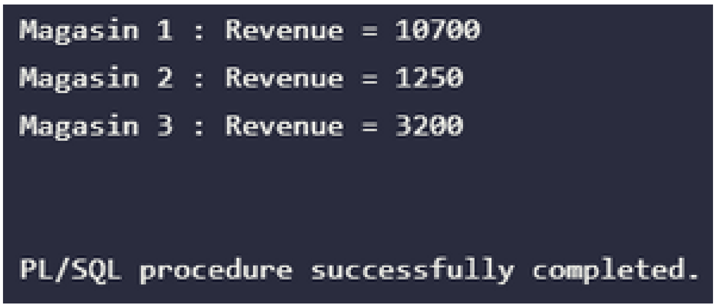


```
Chiffre d'affaires du magasin 1 = 10700


PL/SQL procedure successfully completed.
```

Exercice 8 :_Calcul des revenus générés par chaque magasin pour une période donnée



```sql
SET SERVEROUTPUT ON;

DECLARE
    v_num_m    MAGASIN.num_m%TYPE;
    v_revenue NUMBER;
    i NUMBER := 0;

    CURSOR c_revenue IS
        SELECT m.num_m,
               SUM(v.qte * v.prix_vente) AS revenue
        FROM MAGASIN m
        JOIN VENTE v ON m.num_m = v.num_m
        WHERE v.dat >= DATE '2025-01-01'
          AND v.dat <  DATE '2025-04-01'
        GROUP BY m.num_m;
BEGIN
    OPEN c_revenue;

    LOOP
        FETCH c_revenue INTO v_num_m, v_revenue;
        EXIT WHEN c_revenue%NOTFOUND;

        i := i + 1;
        DBMS_OUTPUT.PUT_LINE(
            'Magasin ' || v_num_m ||
            ' : Revenue = ' || v_revenue
        );
    END LOOP;

    CLOSE c_revenue;
END;
/
```



```
Magasin 1 : Revenue = 10700
Magasin 2 : Revenue = 1250
Magasin 3 : Revenue = 3200


PL/SQL procedure successfully completed.
```