PLSQL TP 1

Objectif :

1. **Développer un bloc PLSQL simple.**
2. **Traitements conditionnels et Traitements répétitifs**

Exercice 1 :

```
1. CREATE TABLE pair_impair(Num NUMBER(3), Reponse VARCHAR2(10)) /
2. DECLARE
   i pair_impair.Num%TYPE;
BEGIN
   i:=1;
   loop
        if MOD(i,2)=0 THEN
             INSERT INTO pair_impair(Num,Reponse) VALUES(i,'pair');
        else
             INSERT INTO pair_impair(Num,Reponse) VALUES(i,'impair');
        END if;
        i:=i+1;
        EXIT WHEN i>100;
   END loop;
   COMMIT;
END;
/
```

Exercice 2 :

```
1. CREATE TABLE premier(Num NUMBER(3), Reponse VARCHAR2(10)) /

2. DECLARE
   j premier.Num%TYPE;
   i NUMBER(4);
   nbr NUMBER(4);
BEGIN
   j:=1;
   loop
        i:=1;
        nbr:=0;
        loop
             if MOD(j,i)=0 THEN
                  nbr:=nbr+1;
             END if;
             i:=i+1;
             EXIT WHEN i>j;
```

```
            END loop;
            if nbr=2 OR j=1 THEN
                  INSERT INTO premier(Num,Reponse) VALUES(j,'oui');
            else
                  INSERT INTO premier(Num,Reponse) VALUES(j,'non');
            END if;
            j:=j+1;
            EXIT WHEN j>100;
      END loop;
      COMMIT;
   END;
   /
```

Exercice 3 :

1. CREATE TABLE calcul(Num1 NUMBER(3), Num2 NUMBER(3), Op VARCHAR2(1), Resultat NUMBER(3)); /

2. ACCEPT n1 PROMPT 'SAISIR LE NUM 1 ';

```
ACCEPT oper PROMPT 'SAISIR L OPERATION ';
ACCEPT n2 PROMPT 'SAISIR LE NUM 2 ';
DECLARE

BEGIN
   if '&oper' LIKE '*' THEN
         INSERT INTO calcul(Num1,Num2,Op,Resultat)
VALUES(&n1,&n2,'&oper',&n1*&n2);
   else
         if '&oper' LIKE '/' THEN
               INSERT INTO calcul(Num1,Num2,Op,Resultat)
VALUES(&n1,&n2,'&oper',&n1/&n2);
         else
               if '&oper' LIKE '+' THEN
                     INSERT INTO calcul(Num1,Num2,Op,Resultat)
VALUES(&n1,&n2,'&oper',&n1+&n2);
               else
                     if '&oper' LIKE '-' THEN
                           INSERT INTO calcul(Num1,Num2,Op,Resultat)
VALUES(&n1,&n2,'&oper',&n1-&n2);
                     END if;
               END if;
         END if;
   END if;
END;
/
```

Exercice 4 :

```
1.  CREATE TABLE PGCD(Num1 NUMBER,Num2 NUMBER,Num3 NUMBER) /
2.  DECLARE
i NUMBER;
j NUMBER;
a NUMBER;
b NUMBER;
BEGIN
    i:=1;
    loop
            j:=1;
            loop
                    a:=i;
                    b:=j;
                    if a=b THEN
                            INSERT INTO PGCD(Num1,Num2,Num3) VALUES(i,j,1);
                    else
                            while (a!=b) loop
                                    if(a>b) THEN
                                            a:=a-b;
                                    else
                                            b:=b-a;
                                    END if;
                            END loop;
                            INSERT INTO PGCD(Num1,Num2,Num3) VALUES(i,j,a);
                    END if;
                    j:=j+1;
                    EXIT WHEN j>i;
            END loop;
            i:=i+1;
            EXIT WHEN i>10;
    END loop;
END;
/
```