1. **Création des tables**

CREATE TABLE PIECE

(

NOP NUMBER(5) ,

DESIGNATION VARCHAR(50),

COULEUR VARCHAR(50),

POIDS NUMBER(10)

)

CREATE TABLE SERVICE

(

NOS NUMBER(5),

INTITULE VARCHAR(50),

LOCALISATION VARCHAR(50)

)

CREATE TABLE ORDRE

(

NOP NUMBER(5),

NOS NUMBER(5),

QUANTITE NUMBER(10)

)

CREATE TABLE NOMENCLATURE

(

NOPA NUMBER(5),

NOPC NUMBER(5),

QUANTITE NUMBER(10)

)

1. **Contraintes d’intégrité**

1.

INSERT INTO PIECE VALUES(1,’PIECE1’,’NOIR’,80);

INSERT INTO PIECE VALUES(1,’PIECE2’,’BLEU’,90);

INSERT INTO PIECE VALUES(1,’PIECE3’,’JAUNE’,60);

2.

INSERT INTO SERVICE VALUES(2,'S1','CASABLANCA');

INSERT INTO SERVICE VALUES(2,'S2','ESSAOUIRA');

INSERT INTO SERVICE VALUES(2,'S3','SAFI');

3.

INSERT INTO ORDRE VALUES(1,3,115);

INSERT INTO ORDRE VALUES(1,4,96);

INSERT INTO ORDRE VALUES(1,5,231);

4.

INSERT INTO NOMENCLATURE VALUES(9,3,10);

INSERT INTO NOMENCLATURE VALUES(4,2,10);

INSERT INTO NOMENCLATURE VALUES(7,2,11);

5.

ALTER TABLE PIECE

ADD CONSTRAINT pc\_pk PRIMARY KEY(NOP);

ALTER TABLE SERVICE

ADD CONSTRAINT sv\_pk PRIMARY KEY(NOS);

ALTER TABLE ORDRE

ADD CONSTRAINT ORDRE\_CLP PRIMARY KEY (NOP, NOS) ;

ALTER TABLE ORDRE

ADD CONSTRAINT o\_fk1 FOREIGN KEY (NOP) REFERENCES PIECE(NOP);

ALTER TABLE ORDRE

ADD CONSTRAINT o\_fk2 FOREIGN KEY (NOS) REFERENCES SERVICE(NOS);

ALTER TABLE NOMENCLATURE

ADD CONSTRAINT NOM\_CLP PRIMARY KEY (NOPA, NOPC) ;

ALTER TABLE NOMENCLATURE

ADD CONSTRAINT n\_fk1 FOREIGN KEY (NOPA) REFERENCES PIECE(NOP);

ALTER TABLE NOMENCLATURE

ADD CONSTRAINT n\_fk2 FOREIGN KEY (NOPC) REFERENCES PIECE(NOP);

6.

7.

ALTER TABLE PIECE

ADD CONSTRAINT color CHECK (COULEUR IN('ROUGE','VERTE','BLEUE','JAUNE'));

1. **Modification de la structure de la base**

1.

ALTER TABLE PIECE MODIFY(DESIGNATION VARCHAR(60));

ALTER TABLE SERVICE MODIFY(INTITULE VARCHAR(60));

2.

ALTER TABLE SERVICE MODIFY (LOCALISATION VARCHAR(40)) ;

3.

ALTER TABLE SERVICE ADD (DIRECTEUR VARCHAR(20)) ;

4.

ALTER TABLE SERVICE DROP UNIQUE (LOCALISATION) ;

5.

ALTER TABLE PIECE DROP PRIMARY KEY;

6.

ALTER TABLE PIECE DROP CONSTRAINT color;

7.

DROP TABLE NOMENCLATURE;

8.

DROP TABLE ORDRE CASCADE CONSTRAINTS ;

SELECT \* FROM PIECE ;

SELECT \* FROM SERVICE ;