**Ice task 2**

CREATE DATABASE ROSEBANKCOLLEGE;

USE ROSEBANKCOLLEGE;

CREATE TABLE STUDENTS(

STUDENT\_NUMBER INT PRIMARY KEY NOT NULL,

STUDENT\_LNAME VARCHAR(30) NOT NULL,

STUDENT\_FNAME VARCHAR(30) NOT NULL,

STUDENT\_AGE SMALLINT NOT NULL);

CREATE TABLE MODULES(

MODULE\_CODE VARCHAR(30) PRIMARY KEY NOT NULL,

MODULE\_NAME VARCHAR(30) NOT NULL,

STUDENT\_NUMBER INT NOT NULL FOREIGN KEY REFERENCES STUDENTS(STUDENT\_NUMBER));

CREATE TABLE STUDENTMODULES(

STUDENT\_NUMBER INT NOT NULL,

MODULE\_CODE VARCHAR(30) NOT NULL,

PRIMARY KEY (STUDENT\_NUMBER, MODULE\_CODE),

FOREIGN KEY (STUDENT\_NUMBER) REFERENCES STUDENTS(STUDENT\_NUMBER),

FOREIGN KEY (MODULE\_CODE) REFERENCES MODULES(MODULE\_CODE));

INSERT INTO STUDENTS VALUES (123, 'Lerato', 'lethata', 18),

(127, 'Lerato', 'Maja', 18),

(124, 'Kayla', 'Lee', 17),

(125, 'Eddie', 'Dewee', 19),

(126, 'Quinton', 'More', 21);

INSERT INTO MODULES VALUES ('Data6211', 'Database', 123),

('Prog5112', 'Programming',124),

('Busi5111', 'Business Information Systems', 125),

('Acc5111', 'Accounting', 127),

('Econ5111', 'Econiomics', 126);

INSERT INTO STUDENTMODULES VALUES (123, 'Busi5111'),

(124, 'Busi5111'),

(123, 'Econ5111'),

(125, 'Acc5111'),

(125, 'Busi5111'),

(123, 'Prog5112'),

(127, 'Busi5111'),

(126, 'Data6211'),

(127, 'Data6211'),

(125, 'Data6211');

--ADDING NEW COLUMN IN THE TABLE

ALTER TABLE STUDENTS

ADD STUDENT\_ADDRESS VARCHAR(100);

--UPDATE TABLE TO ADD RECORDS

UPDATE STUDENTS

SET STUDENT\_ADDRESS = '120 Mfolo street Soweto'

WHERE STUDENT\_LNAME = 'Kayla';

--UPDATE TABLE TO ADD RECORDS

UPDATE STUDENTS

SET STUDENT\_ADDRESS = '120 Mfolo street Soweto'

WHERE STUDENT\_NUMBER = 123;

--ICE TASK 2

--ADD A NEW COLUMN

ALTER TABLE STUDENTS

ADD STUDENT\_DOB DATE;

--ADD A NEW COLUMN

ALTER TABLE MODULES

ADD MODULEMARK INT;

--UPDATES

UPDATE STUDENTS

SET STUDENT\_DOB = '2004-08-01'

WHERE STUDENT\_NUMBER = 123;

--UPDATES

UPDATE MODULES

SET MODULEMARK = 75

WHERE STUDENT\_NUMBER = 125;

SELECT \* FROM STUDENTS;

SELECT \* FROM MODULES;

SELECT \* FROM STUDENTMODULES;

A screenshot of a computer

Description automatically generated

**Reference**

Gido, J. Clements, P.J. Baker, R. 2022. Successful Project Management in South Africa. Second edition. Boston: Congage Learning.