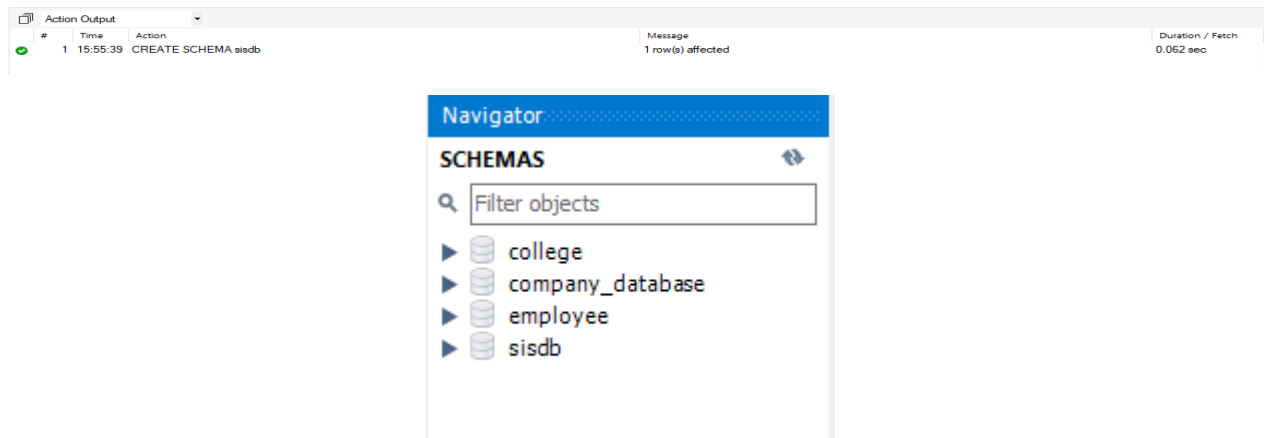# TASK 1 – Database Design:-

1. Create schema: CREATE SCHEMA sisdb;

2, 4. CREATE TABLE, ASSIGNING PRIMARY, FOREIGN KEYS

USE sisdb;

CREATE TABLE students (

    student_id INT NOT NULL AUTO_INCREMENT,

    first_name VARCHAR(50),

    last_name VARCHAR(50),

    date_of_birth DATE,

    email VARCHAR(50),

    phone_number INT,

    PRIMARY KEY (student_id)

);

id	select_type	table	partitions	type	possible_keys	key	key_len	ref	rows	filtered	Extra
1	SIMPLE	students	NULL	ALL	NULL	NULL	NULL	NULL	1	100.00	NULL

CREATE TABLE teacher (

    teacher_id INT,

first_name VARCHAR(50),

last_name VARCHAR(50),

email VARCHAR(50),

PRIMARY KEY (teacher_id)

);

⊘ 5 16:03:20 CREATE TABLE teacher (teacher_id INT,   first_name VARCHAR(50),   last_name VAR...   0 row(s) affected   0.203 sec

	id	select_type	table	partitions	type	possible_keys	key	key_len	ref	rows	filtered	Extra
▶	1	SIMPLE	teacher	NULL	ALL	NULL	NULL	NULL	NULL	1	100.00	NULL

CREATE TABLE courses (

course_id INT NOT NULL AUTO_INCREMENT,

course_name VARCHAR(100),

credits INT,

teacher_id INT,

PRIMARY KEY (course_id),

FOREIGN KEY (teacher_id)

REFERENCES teacher (teacher_id)

);

⊘ 7 16:08:16 CREATE TABLE courses (course_id INT NOT NULL AUTO_INCREMENT,   course_na...   0 row(s) affected   0.328 sec

	id	select_type	table	partitions	type	possible_keys	key	key_len	ref	rows	filtered	Extra
▶	1	SIMPLE	courses	NULL	ALL	NULL	NULL	NULL	NULL	1	100.00	NULL

CREATE TABLE enrollments (

enrollment_id INT NOT NULL AUTO_INCREMENT,

student_id INT,

course_id INT,

enrollment_date DATE,

PRIMARY KEY (enrollment_id),

FOREIGN KEY (student_id)

REFERENCES students (student_id)

        ON DELETE CASCADE,

    FOREIGN KEY (course_id)

        REFERENCES courses (course_id)

        ON DELETE CASCADE

);

| | 9 16:10:50 CREATE TABLE enrollments (enrollment_id INT, student_id INT, course_id INT, enr... 0 row(s) affected | | | | | | | | | 0.562 sec |

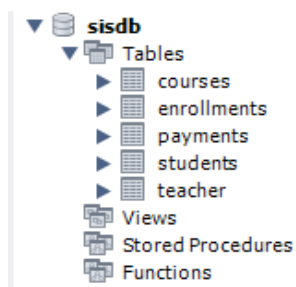|	id	select_type	table	partitions	type	possible_keys	key	key_len	ref	rows	filtered	Extra
▶	1	SIMPLE	enrollments	NULL	ALL	NULL	NULL	NULL	NULL	1	100.00	NULL

CREATE TABLE payments (

    payment_id INT,

    student_id INT,

    amount INT,

    payment_date DATE,

    PRIMARY KEY (payment_id),

    FOREIGN KEY (student_id)

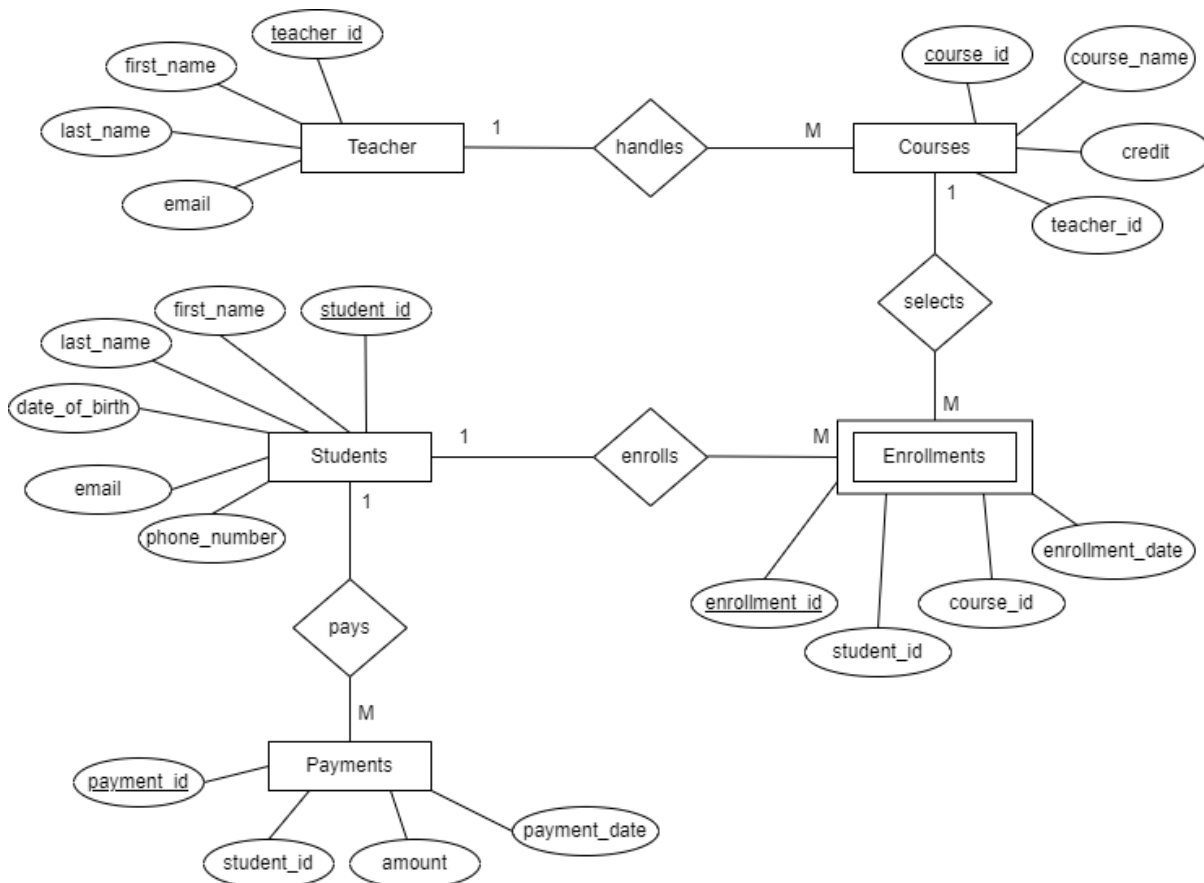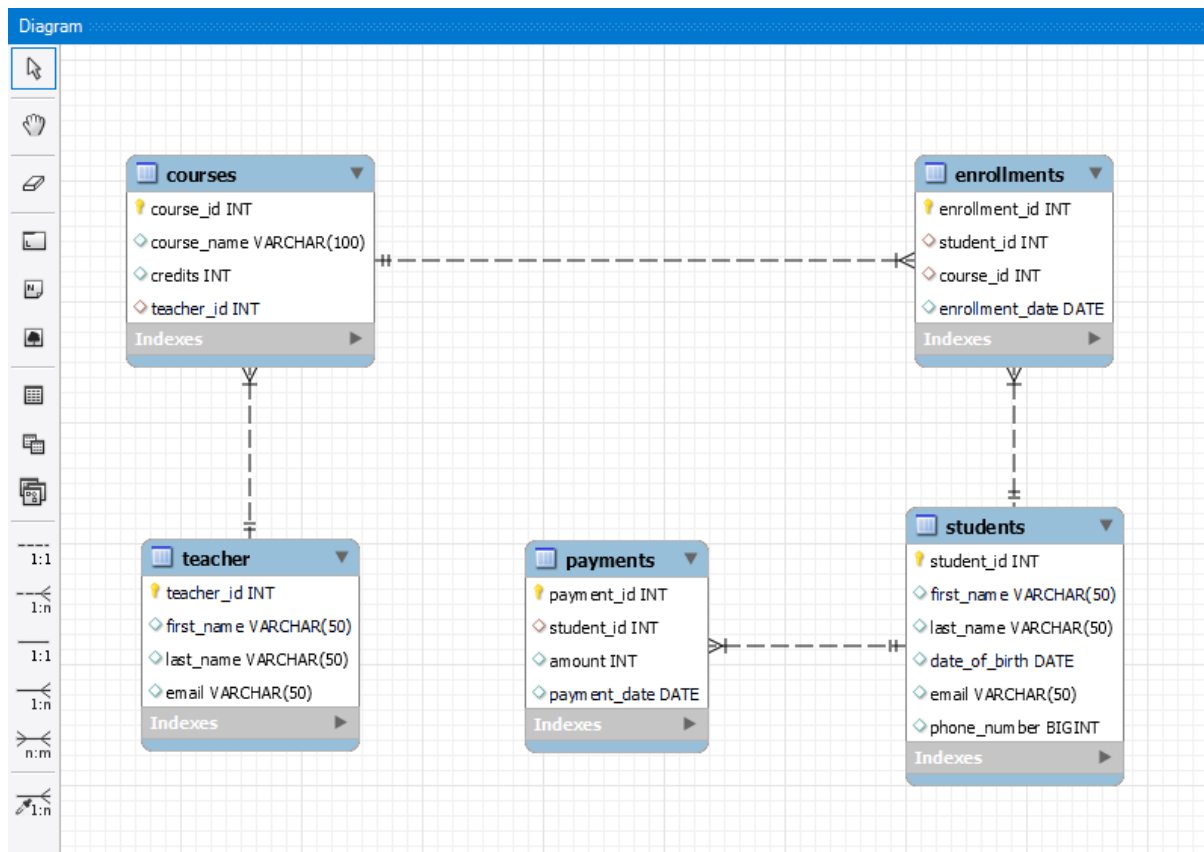   REFERENCES students (student_id)

);

| | 10 16:11:53 CREATE TABLE payments (payment_id INT, student_id INT, amount INT, payme... 0 row(s) affected | | | | | | | | | 0.203 sec |

	id	select_type	table	partitions	type	possible_keys	key	key_len	ref	rows	filtered	Extra
▶	1	SIMPLE	payments	NULL	ALL	NULL	NULL	NULL	NULL	1	100.00	NULL

Database

▼ 🗄 **sisdb**
  ▼ 🗂 Tables
    ▶ 🎲 courses
    ▶ 🎲 enrollments
    ▶ 🎲 payments
    ▶ 🎲 students
    ▶ 🎲 teacher
  🗂 Views
  🗂 Stored Procedures
  🗂 Functions

3. ER Diagram:

5. INSERT VALUES:

1. Students Table:

INSERT INTO students(student_id, first_name, last_name, date_of_birth, email, phone_number) VALUES

(101,'Steven',' King','2002-08-17','Steveking@gmai.com',9894850246),

(102,'Neena','Kochhar','2002-05-06','NeenaK@gmai.com',8897723245),

(103,'Alyssa','Mavris','2001-12-29','AlyssaMavris@gmai.com',7364810298),

(104,'Alexander','Hunold','2003-08-02','AlexHunold@gmai.com',8836487848),

(105,'David','Austin','2002-01-14','DAustin@gmai.com',8452866298),

(106,'Karen','Colmenares','2002-09-09','Karen245@gmai.com',9345567353),

(107,'Julia','Nayer','2003-11-21','JuliaNayer@gmai.com',9444856832),

(108,'Eleni','Zlotkey','2002-07-07','EZlotkey@gmai.com',7460925300),

(109,'Sundar','Andre','2003-03-14','AndreSundar@gmai.com',6932601744),

(110,'Lisa','Ozer','2003-04-27','Lisaozer@gmai.com',9600206310);

12 14:15:24	USE sisdb		0 row(s) affected		0.000 sec
13 14:15:24	INSERT INTO students(student_id, first_name, last_name, date_of_birth, email, phone_number)...		10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0		0.062 sec

student_id	first_name	last_name	date_of_birth	email	phone_number
101	Steven	King	2002-08-17	Steveking@gmai.com	9894850246
102	Neena	Kochhar	2002-05-06	NeenaK@gmai.com	8897723245
103	Alyssa	Mavris	2001-12-29	AlyssaMavris@gmai.com	7364810298
104	Alexander	Hunold	2003-08-02	AlexHunold@gmai.com	8836487848
105	David	Austin	2002-01-14	DAustin@gmai.com	8452866298
106	Karen	Colmenares	2002-09-09	Karen245@gmai.com	9345567353
107	Julia	Nayer	2003-11-21	JuliaNayer@gmai.com	9444856832
108	Eleni	Zlotkey	2002-07-07	EZlotkey@gmai.com	7460925300
109	Sundar	Andre	2003-03-14	AndreSundar@gmai.com	6932601744
110	Lisa	Ozer	2003-04-27	Lisaozer@gmai.com	9600206310
NULL	NULL	NULL	NULL	NULL	NULL

2. Teachers Table:

INSERT INTO teacher (teacher_id, first_name, last_name, email) VALUES

(201,'Douglas','Grant','Douglas.Grant@xyz.com'),

(202,'Kevin','Feeney','Kevin.Feeney@xyz.com'),

(203,'Samuel','McCain ','Samuel.McCain@xyz.com'),

(204,'Brevin','Dice','Brevin.Dice@xyz.com'),

(205,'Regina','Oleveria','Regina.Oleveria@xyz.com'),

(206,'John','Mathew','John.Mathew@xyz.com'),

(207,'Jim','Parker','Jim.Parker@xyz.com'),

(208,'Sophia','Ran','Sophia.Ran@xyz.com'),

(209,'Wendi','Blake','Wendi.Blake@xyz.com'),

(210,'Stephan','King','Stephan.King@xyz.com');

| | 16 14:44:47 | INSERT INTO teacher (teacher_id, first_name, last_name, email) VALUES (201,'Douglas','Gra... | 10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0 | | 0.110 sec |

Result Grid | Filter Rows: | Edit: | Export/Import:

	teacher_id	first_name	last_name	email
▶	201	Douglas	Grant	Douglas.Grant@xyz.com
	202	Kevin	Feeney	Kevin.Feeney@xyz.com
	203	Samuel	McCain	Samuel.McCain@xyz.com
	204	Brevin	Dice	Brevin.Dice@xyz.com
	205	Regina	Oleveria	Regina.Oleveria@xyz.com
	206	John	Mathew	John.Mathew@xyz.com
	207	Jim	Parker	Jim.Parker@xyz.com
	208	Sophia	Ran	Sophia.Ran@xyz.com
	209	Wendi	Blake	Wendi.Blake@xyz.com
	210	Stephan	King	Stephan.King@xyz.com
*	NULL	NULL	NULL	NULL

3. **Courses Table:**

INSERT INTO courses (course_id, course_name, credits, teacher_id) VALUES

(301,'AERONAUTICAL',139,210),

(302,'ECE',140,203),

(303,'EEE',140,208),

(304,'EIE',140,206),

(305,'CES',145,204),

(306,'CSBS',135,202),

(307,'IT',135,209),

(308,'MECHANICAL',140,201),

(309,'AGRICULTURE',130,207),

(310,'TEXTILE',125,205);

| | 18 15:14:12 | INSERT INTO courses (course_id, course_name, credits, teacher_id) VALUES (301,'AERONA... | 10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0 | | 0.125 sec |

4. Enrollments Table:

INSERT INTO enrollments (enrollment_id, student_id, course_id, enrollment_date)

VALUES

(4001,101,306,'2020-05-18'),

(4002,102,301,'2020-08-24'),

(4003,103,309,'2020-06-03'),

(4004,104,305,'2020-07-07'),

(4005,105,302,'2020-07-16'),

(4006,106,308,'2020-05-25'),

(4007,107,303,'2020-06-30'),

(4008,108,310,'2020-08-28'),

(4009,109,304,'2020-06-27'),

(4010,110,307,'2020-07-05');

	enrollment_id	student_id	course_id	enrollment_date
▶	4001	101	306	2020-05-18
	4002	102	301	2020-08-24
	4003	103	309	2020-06-03
	4004	104	305	2020-07-07
	4005	105	302	2020-07-16
	4006	106	308	2020-05-25
	4007	107	303	2020-06-30
	4008	108	310	2020-08-28
	4009	109	304	2020-06-27
	4010	110	307	2020-07-05
	NULL	NULL	NULL	NULL

5. Payments Table:

INSERT INTO payments (payment_id, student_id, amount, payment_date) VALUES

(01,102,51000,'2020-09-07'),

(02,106,66000,'2020-09-03'),

(03,109,55000,'2020-09-20'),

(04,101,60000,'2020-09-12'),

(05,110,58000,'2020-09-05'),

(06,103,65000,'2020-09-28'),

(07,108,67000,'2020-09-30'),

(08,105,64000,'2020-09-01'),

(09,107,50000,'2020-09-15'),

(10,104,53000,'2020-09-23');

	payment_id	student_id	amount	payment_date
▶	1	102	51000	2020-09-07
	2	106	66000	2020-09-03
	3	109	55000	2020-09-20
	4	101	60000	2020-09-12
	5	110	58000	2020-09-05
	6	103	65000	2020-09-28
	7	108	67000	2020-09-30
	8	105	64000	2020-09-01
	9	107	50000	2020-09-15
	10	104	53000	2020-09-23
✳	NULL	NULL	NULL	NULL

Result Grid | Filter Rows: | Edit: