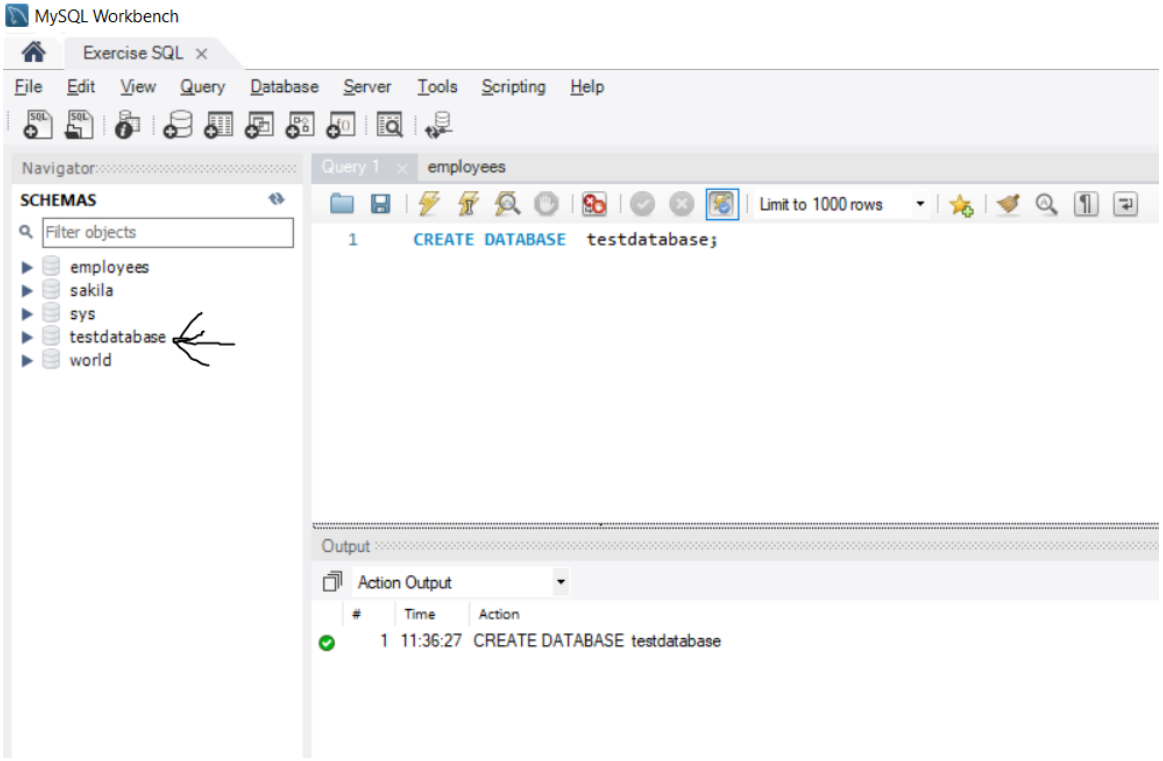
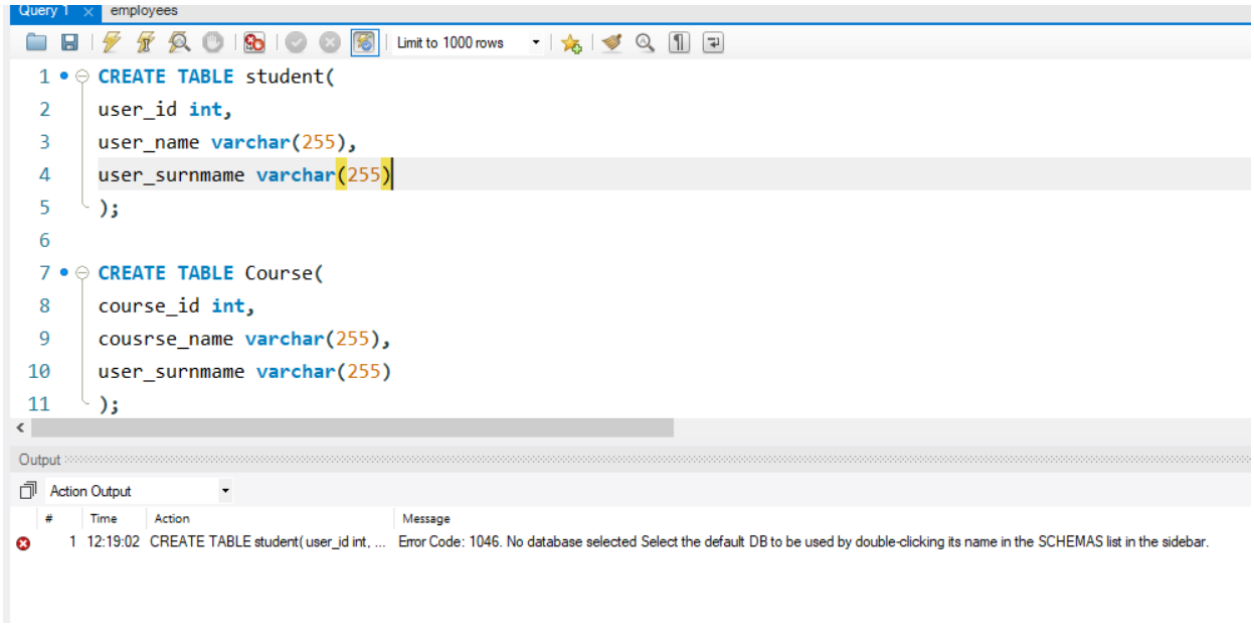
EXERCISE SQL.

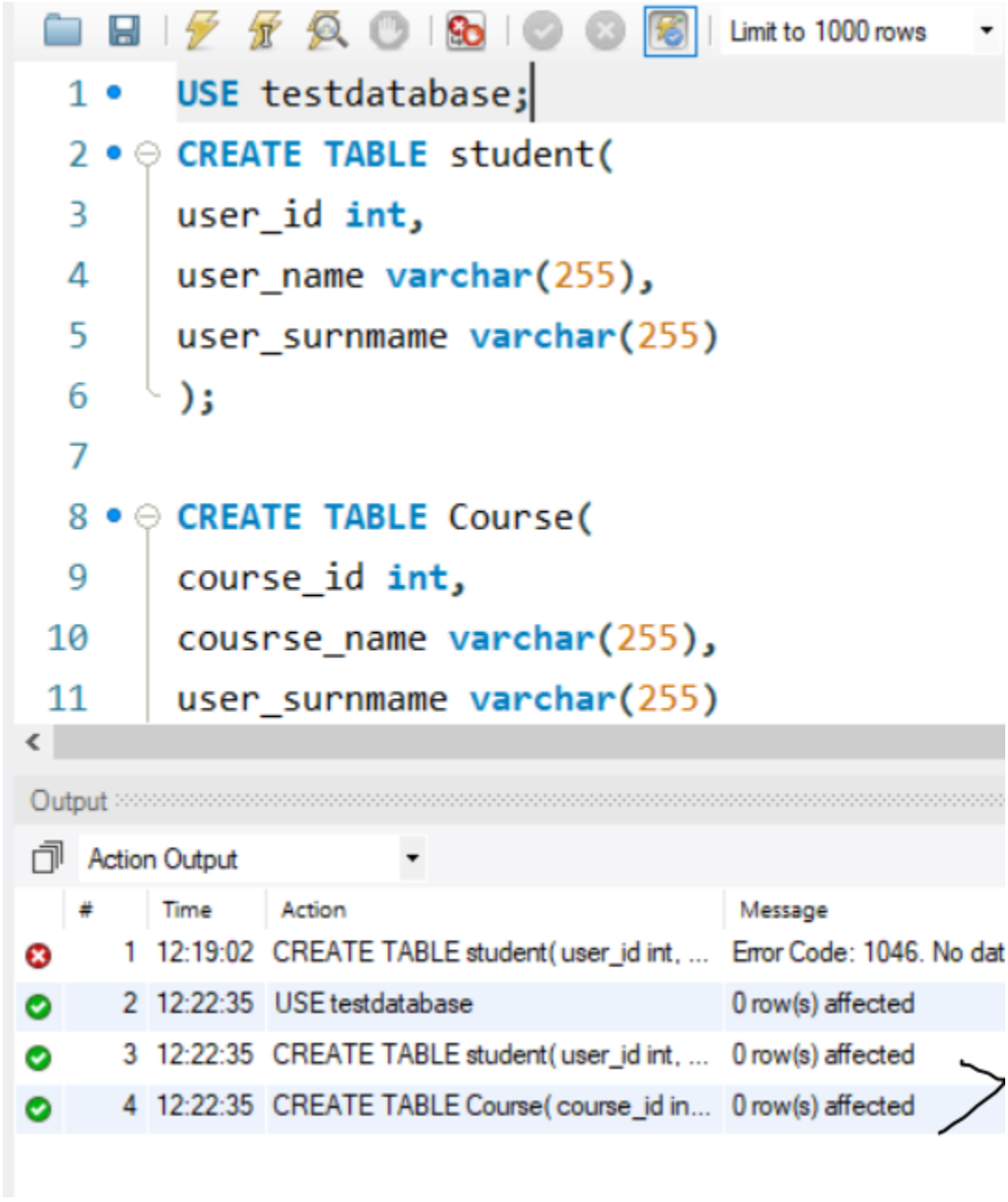
1. CREATE DADABASE AND TABLE

CREATE DATABASE testdatabase;



CREATE TABLE




Limit to 1000 rows
1 • USE testdatabase;
2 • CREATE TABLE student(
3 user_id int,
4 user_name varchar(255),
5 user_surnmame varchar(255)
6);
7
8 • CREATE TABLE Course(
9 course_id int,
10 cousrse_name varchar(255),
11 user_surnmame varchar(255)
Output
Action Output
Time Action Message
1 12:19:02 CREATE TABLE student(user_id int, ... Error Code: 1046. No dat
2 12:22:35 USE testdatabase 0 row(s) affected
3 12:22:35 CREATE TABLE student(user_id int, ... 0 row(s) affected
4 12:22:35 CREATE TABLE Course(course_id in... 0 row(s) affected

```
14 • CREATE TABLE Enrollment (
15   enrollment_id int,
16   student_id int,
17   course_id int
18   );
19
```

Output

Action Output

#	Time	Action	Message
1	16:49:37	CREATE TABLE Enrollment (enrollm...	0 row(s) affected

2. DROP TABLE AND DATABASE

```
14 • DROP TABLE Course, student;
15
16
```

Output

Action Output

#	Time	Action	Message
1	12:25:17	DROP TABLE Course, student	0 row(s) affected

```
9 •  DROP DATABASE testdatabase;
10
```

Output

Action Output

#	Time	Action	Message
1	12:07:48	DROP DATABASE testdatabase	0 row(s) affected

3. Alter table to add unique, primary and foreign key constraints

```
ALTER TABLE student ADD PRIMARY KEY(student_id) ;
ALTER TABLE student ADD UNIQUE(student_id) ;
```

Output

Time	Action	Message
15:16:02	ALTER TABLE student ...	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0
15:16:07	ALTER TABLE student ...	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0

```
19 •  ALTER TABLE Course ADD PRIMARY KEY(course_id) ;
20 •  ALTER TABLE Course ADD UNIQUE(course_id) ;
21
22
```

Output

Action Output

#	Time	Action	Message
1	16:26:32	ALTER TABLE Course ADD PRIMA...	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0
2	16:27:12	ALTER TABLE Course ADD UNIQU...	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0

```
ALTER TABLE Enrollment ADD FOREIGN KEY fk_payment_student(student_id)
REFERENCES student(student_id);
ALTER TABLE Enrollment ADD FOREIGN KEY fk_payment_course(course_id)
REFERENCES Course(course_id);
```

Cont

ion Output

Time	Action	Message
1 17:55:33	ALTER TABLE Enrollment ADD FOREIGN KEY fk_payment_course(course_id) REFERENCES Course(course_id)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0

4. INSERT VALUES.

```
•  INSERT  INTO STUDENT (STUDENT_NAME,STUDENT_SURNMAME) VALUES('JUAN', 'SANCHEZ');
```

Context Help Snippets

Action Output

Time	Action	Message
1 18:02:12	INSERT INTO STUDENT (STUDENT_NAME,STUDENT_SURNMAME) VALUES('JUAN', 'SANCHEZ')	Error Code: 1364. Field 'student_id' doesn't have a default value

```
34 •  INSERT  INTO STUDENT (student_id,STUDENT_NAME,STUDENT_SURNMAME) VALUES(1,'JUAN', 'SANCHEZ');
35
```

Context Help Snippets

Output

Action Output

#	Time	Action	Message
1	18:02:12	INSERT INTO STUDENT (STUDENT_NAME,STUDENT_SURNMAME) VALUES('JUAN', 'SANCHEZ')	Error Code: 1364. Field 'student_id' doesn't have a default value
2	18:03:12	INSERT INTO STUDENT (student_id,STUDENT_NAME,STUDENT_SURNMAME) VALUES(1,'JUAN', 'SANCHEZ')	1 row(s) affected

```
ALTER TABLE COURSE CHANGE USER_SURNMAME DESCRIPTION VARCHAR(500);
```

Output

Time	Action	Message
18:23:12	ALTER TABLE COURSE CHANGE USER_SURNMAME DESCRIPTION VARCHAR(500)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0

```
INSERT  INTO STUDENT (student_id,STUDENT_NAME,STUDENT_SURNMAME) VALUES(1,'JUAN', 'SANCHEZ');
INSERT  INTO STUDENT (student_id,STUDENT_NAME,STUDENT_SURNMAME) VALUES(2,'MARIA', 'MORALES');
INSERT  INTO STUDENT (student_id,STUDENT_NAME,STUDENT_SURNMAME) VALUES(3,'MAY', 'PEREZ');

INSERT  INTO Course (course_id,COUSRSE_NAME,DESCRIPTION) VALUES(1,'Microservices', 'Learn microservices'
INSERT  INTO Course (course_id,COUSRSE_NAME,DESCRIPTION) VALUES(2,'LamBdas and streams', 'learn lambdas'
INSERT  INTO Course (course_id,COUSRSE_NAME,DESCRIPTION) VALUES(3,'Unit tests with mockito', 'learn test
```

```
44  INSERT  INTO ENROLLMENT(enrollment_id,student_id,course_id) VALUES(1,1,1);
45  INSERT  INTO ENROLLMENT(enrollment_id,student_id,course_id) VALUES(1,1,2);
46
47
```

Output

Action Output

#	Time	Action	Message
1	18:48:01	INSERT INTO ENROLLMENT(enrollment_id,student_id,course_id) VALUES(1,1,1)	1 row(s) affected
2	18:48:04	INSERT INTO ENROLLMENT(enrollment_id,student_id,course_id) VALUES(1,1,2)	1 row(s) affected

5. DELETE a few courses

```
47  DELETE FROM COURSE WHERE COURSE_ID=2;
```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	18:58:03	DELETE FROM COURSE WHERE COURSE_ID=2	Error Code: 1451. Cannot delete or update a parent row: a foreign key constraint fails (`testdatabase`.`enrollment`, CONSTRAINT `enrollment_i...	0.016 sec

```
47 •  DELETE FROM COURSE WHERE COURSE_ID=2;
48 •  DELETE FROM COURSE WHERE COURSE_ID=1;
49 •  DELETE FROM COURSE WHERE COURSE_ID=3;
```

Output

Action Output

#	Time	Action	Message
1	19:51:03	DELETE FROM COURSE WHERE COURSE_ID=2	1 row(s) affected
2	19:53:18	SELECT * FROM testdatabase.enrollment LIMIT 0, 1000	1 row(s) returned
3	19:54:07	DELETE FROM COURSE WHERE COURSE_ID=1	1 row(s) affected
4	19:54:11	DELETE FROM COURSE WHERE COURSE_ID=3	1 row(s) affected

```
51 •  ALTER TABLE enrollment
52    DROP FOREIGN KEY enrollment_ibfk_2;
53
54 •  ALTER TABLE enrollment
55    ADD CONSTRAINT enrollment_ibfk_2
56      FOREIGN KEY (course_id)
57      REFERENCES course (course_id)
58      ON DELETE CASCADE;
59
```

Output

Action Output

#	Time	Action	Message
1	19:46:51	ALTER TABLE enrollment DROP FOREIGN KEY enrollment_ibfk_2	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0
2	19:46:58	ALTER TABLE enrollment ADD CONSTRAINT enrollment_ibfk_2 FO...	2 row(s) affected Records: 2 Duplicates: 0 Warnings: 0

6. Fetch all student details who have courses enrolled and all students

```
66 •  SELECT * FROM STUDENT INNER JOIN ENROLLMENT ON STUDENT.STUDENT_ID=ENROLLMENT.STUDENT_ID;
67
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	student_name	student_surnname	enrollment_id	student_id	course_id
1	JUAN	SANCHEZ	2	1	2
1	JUAN	SANCHEZ	1	1	1

```
69 •  SELECT * FROM
70    STUDENT INNER JOIN ENROLLMENT ON STUDENT.STUDENT_ID=ENROLLMENT.STUDENT_ID
71    INNER JOIN COURSE ON ENROLLMENT.COURSE_ID=COURSE.COURSE_ID;
72
73
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

student_id	student_name	student_surnmame	enrollment_id	student_id	course_id	course_id	cousrse_name	DESCRIPTION
1	JUAN	SANCHEZ	1	1	1	1	Microservices	Learn microservices
1	JUAN	SANCHEZ	2	1	2	2	LamBdas and streams	learn lambdas