

CRUD

UPDATE course
SET duration=90;

TRANSACTION BEGIN

Update performs on id=1

Update performs on id=2

Update performs on id=3

COMMIT

Successful transaction

UPDATE course
SET name = 'JavaScript';

TRANSACTION BEGIN

Update performs on id=1

Update performs on id=2

ROLLBACK

Failed transaction

CREATE

-- Insert query [Date Format YYYY-MM-DD]

```
INSERT INTO course(name , description , code, duration, starts_at)
VALUES ('Python', 'A course for beginner', 'PY-2024-1', 180, '2024-06-16');
```

– multi insert

```
INSERT INTO course(name , description , code, duration, starts_at)
VALUES
('Python', 'A course for beginner', 'PY-2024-1', 180, '2024-06-16'),
('React', 'A Frontend course for beginner', 'RCT-2024-1', 180, '2024-06-16'),
('JavaScript', null, null, null, null);
```

RETRIEVE

- all column selection for all row

```
SELECT * FROM course;
```

- specific column selection for all row

```
SELECT  
    name,  
    starts_at  
FROM course;
```

- Using Alias

```
SELECT  
    name AS "Course Name",  
    starts_at AS "Shuru hobe"  
FROM course;
```

– select all column for a specific id

```
select * from course  
WHERE id = 7;
```

– Select specific column for a specific id

```
select name,code from course  
WHERE id = 7;
```

Update

- one row update for one column

```
UPDATE course
```

```
SET name='Java Script'
```

```
WHERE id = 5;
```

- multi column update for one row

```
UPDATE course
```

```
SET name='Java Script', starts_at = '2024-07-20'
```

```
WHERE id = 5;
```

- whole row update

```
UPDATE course
```

```
SET duration=90;
```

DELETE

- Delete all rows (Dangerous)

```
DELETE FROM course;
```

- single delete

```
DELETE FROM course
```

```
WHERE id = 8;
```