**RDBMS (Relational Database Management System)**

1. Data is organized in structures and stored.
2. Table is the main entity where the data gets stored.
3. Table contains rows & columns.
4. Intersection of row & column creates a cell.
5. Row is also called as record
6. Column is also called as fields

Client – Server Concept

MySQL

1. Its open Source RDBMS Software
2. It’s developed using C & C++
3. It provides support to SQL & many data types

P@ssw0rd

Different ways of Accessing RDBMS

1. By using command prompt/Command line utility provided by developers
2. By using Interface/program provided by the RDBMS developers
3. By using any programming Languages
4. Using Command Line Utility of MySQL

Show databases;

Use <database\_name>;

Show tables;

show databases;

mysql> show databases;

+--------------------+

| Database |

+--------------------+

| information\_schema |

| mysql |

| performance\_schema |

| sakila |

| sys |

| world |

+--------------------+

6 rows in set (0.08 sec)

mysql> show database;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that

corresponds to your MySQL server version for the right syntax to use near 'datab

ase' at line 1

mysql> show databases;

+--------------------+

| Database |

+--------------------+

| information\_schema |

| mysql |

| performance\_schema |

| sakila |

| sys |

| world |

+--------------------+

6 rows in set (0.08 sec)

mysql> show tables;

ERROR 1046 (3D000): No database selected

mysql> use mysql;

Database changed

mysql> show tables;

+---------------------------+

| Tables\_in\_mysql |

+---------------------------+

| columns\_priv |

| db |

| engine\_cost |

| event |

| func |

| general\_log |

| gtid\_executed |

| help\_category |

| help\_keyword |

| help\_relation |

| help\_topic |

| innodb\_index\_stats |

| innodb\_table\_stats |

| ndb\_binlog\_index |

| plugin |

| proc |

| procs\_priv |

| proxies\_priv |

| server\_cost |

| servers |

| slave\_master\_info |

| slave\_relay\_log\_info |

| slave\_worker\_info |

| slow\_log |

| tables\_priv |

| time\_zone |

| time\_zone\_leap\_second |

| time\_zone\_name |

| time\_zone\_transition |

| time\_zone\_transition\_type |

| user |

+---------------------------+

31 rows in set (0.00 sec)

mysql> use sakila;

Database changed

mysql> show tables;

+----------------------------+

| Tables\_in\_sakila |

+----------------------------+

| actor |

| actor\_info |

| address |

| category |

| city |

| country |

| customer |

| customer\_list |

| film |

| film\_actor |

| film\_category |

| film\_list |

| film\_text |

| inventory |

| language |

| nicer\_but\_slower\_film\_list |

| payment |

| rental |

| sales\_by\_film\_category |

| sales\_by\_store |

| staff |

| staff\_list |

| store |

+----------------------------+

23 rows in set (0.00 sec)

mysql> select \* from actor;

+----------+-------------+--------------+---------------------+

| actor\_id | first\_name | last\_name | last\_update |

+----------+-------------+--------------+---------------------+

| 1 | PENELOPE | GUINESS | 2006-02-15 04:34:33 |

| 2 | NICK | WAHLBERG | 2006-02-15 04:34:33 |

| 3 | ED | CHASE | 2006-02-15 04:34:33 |

| 4 | JENNIFER | DAVIS | 2006-02-15 04:34:33 |

| 5 | JOHNNY | LOLLOBRIGIDA | 2006-02-15 04:34:33 |

| 6 | BETTE | NICHOLSON | 2006-02-15 04:34:33 |

| 7 | GRACE | MOSTEL | 2006-02-15 04:34:33 |

| 8 | MATTHEW | JOHANSSON | 2006-02-15 04:34:33 |

| 9 | JOE | SWANK | 2006-02-15 04:34:33 |

| 10 | CHRISTIAN | GABLE | 2006-02-15 04:34:33 |

| 11 | ZERO | CAGE | 2006-02-15 04:34:33 |

| 12 | KARL | BERRY | 2006-02-15 04:34:33 |

| 13 | UMA | WOOD | 2006-02-15 04:34:33 |

| 14 | VIVIEN | BERGEN | 2006-02-15 04:34:33 |

| 15 | CUBA | OLIVIER | 2006-02-15 04:34:33 |

| 16 | FRED | COSTNER | 2006-02-15 04:34:33 |

| 17 | HELEN | VOIGHT | 2006-02-15 04:34:33 |

| 18 | DAN | TORN | 2006-02-15 04:34:33 |

| 19 | BOB | FAWCETT | 2006-02-15 04:34:33 |

| 20 | LUCILLE | TRACY | 2006-02-15 04:34:33 |

| 21 | KIRSTEN | PALTROW | 2006-02-15 04:34:33 |

| 22 | ELVIS | MARX | 2006-02-15 04:34:33 |

| 23 | SANDRA | KILMER | 2006-02-15 04:34:33 |

| 24 | CAMERON | STREEP | 2006-02-15 04:34:33 |

| 25 | KEVIN | BLOOM | 2006-02-15 04:34:33 |

| 26 | RIP | CRAWFORD | 2006-02-15 04:34:33 |

| 27 | JULIA | MCQUEEN | 2006-02-15 04:34:33 |

| 28 | WOODY | HOFFMAN | 2006-02-15 04:34:33 |

| 29 | ALEC | WAYNE | 2006-02-15 04:34:33 |

| 30 | SANDRA | PECK | 2006-02-15 04:34:33 |

| 31 | SISSY | SOBIESKI | 2006-02-15 04:34:33 |

| 32 | TIM | HACKMAN | 2006-02-15 04:34:33 |

| 33 | MILLA | PECK | 2006-02-15 04:34:33 |

| 34 | AUDREY | OLIVIER | 2006-02-15 04:34:33 |

| 35 | JUDY | DEAN | 2006-02-15 04:34:33 |

| 36 | BURT | DUKAKIS | 2006-02-15 04:34:33 |

| 37 | VAL | BOLGER | 2006-02-15 04:34:33 |

| 38 | TOM | MCKELLEN | 2006-02-15 04:34:33 |

| 39 | GOLDIE | BRODY | 2006-02-15 04:34:33 |

| 40 | JOHNNY | CAGE | 2006-02-15 04:34:33 |

| 41 | JODIE | DEGENERES | 2006-02-15 04:34:33 |

| 42 | TOM | MIRANDA | 2006-02-15 04:34:33 |

| 43 | KIRK | JOVOVICH | 2006-02-15 04:34:33 |

| 44 | NICK | STALLONE | 2006-02-15 04:34:33 |

| 45 | REESE | KILMER | 2006-02-15 04:34:33 |

| 46 | PARKER | GOLDBERG | 2006-02-15 04:34:33 |

| 47 | JULIA | BARRYMORE | 2006-02-15 04:34:33 |

| 48 | FRANCES | DAY-LEWIS | 2006-02-15 04:34:33 |

| 49 | ANNE | CRONYN | 2006-02-15 04:34:33 |

| 50 | NATALIE | HOPKINS | 2006-02-15 04:34:33 |

| 51 | GARY | PHOENIX | 2006-02-15 04:34:33 |

| 52 | CARMEN | HUNT | 2006-02-15 04:34:33 |

| 53 | MENA | TEMPLE | 2006-02-15 04:34:33 |

| 54 | PENELOPE | PINKETT | 2006-02-15 04:34:33 |

| 55 | FAY | KILMER | 2006-02-15 04:34:33 |

| 56 | DAN | HARRIS | 2006-02-15 04:34:33 |

| 57 | JUDE | CRUISE | 2006-02-15 04:34:33 |

| 58 | CHRISTIAN | AKROYD | 2006-02-15 04:34:33 |

| 59 | DUSTIN | TAUTOU | 2006-02-15 04:34:33 |

| 60 | HENRY | BERRY | 2006-02-15 04:34:33 |

| 61 | CHRISTIAN | NEESON | 2006-02-15 04:34:33 |

| 62 | JAYNE | NEESON | 2006-02-15 04:34:33 |

| 63 | CAMERON | WRAY | 2006-02-15 04:34:33 |

| 64 | RAY | JOHANSSON | 2006-02-15 04:34:33 |

| 65 | ANGELA | HUDSON | 2006-02-15 04:34:33 |

| 66 | MARY | TANDY | 2006-02-15 04:34:33 |

| 67 | JESSICA | BAILEY | 2006-02-15 04:34:33 |

| 68 | RIP | WINSLET | 2006-02-15 04:34:33 |

| 69 | KENNETH | PALTROW | 2006-02-15 04:34:33 |

| 70 | MICHELLE | MCCONAUGHEY | 2006-02-15 04:34:33 |

| 71 | ADAM | GRANT | 2006-02-15 04:34:33 |

| 72 | SEAN | WILLIAMS | 2006-02-15 04:34:33 |

| 73 | GARY | PENN | 2006-02-15 04:34:33 |

| 74 | MILLA | KEITEL | 2006-02-15 04:34:33 |

| 75 | BURT | POSEY | 2006-02-15 04:34:33 |

| 76 | ANGELINA | ASTAIRE | 2006-02-15 04:34:33 |

| 77 | CARY | MCCONAUGHEY | 2006-02-15 04:34:33 |

| 78 | GROUCHO | SINATRA | 2006-02-15 04:34:33 |

| 79 | MAE | HOFFMAN | 2006-02-15 04:34:33 |

| 80 | RALPH | CRUZ | 2006-02-15 04:34:33 |

| 81 | SCARLETT | DAMON | 2006-02-15 04:34:33 |

| 82 | WOODY | JOLIE | 2006-02-15 04:34:33 |

| 83 | BEN | WILLIS | 2006-02-15 04:34:33 |

| 84 | JAMES | PITT | 2006-02-15 04:34:33 |

| 85 | MINNIE | ZELLWEGER | 2006-02-15 04:34:33 |

| 86 | GREG | CHAPLIN | 2006-02-15 04:34:33 |

| 87 | SPENCER | PECK | 2006-02-15 04:34:33 |

| 88 | KENNETH | PESCI | 2006-02-15 04:34:33 |

| 89 | CHARLIZE | DENCH | 2006-02-15 04:34:33 |

| 90 | SEAN | GUINESS | 2006-02-15 04:34:33 |

| 91 | CHRISTOPHER | BERRY | 2006-02-15 04:34:33 |

| 92 | KIRSTEN | AKROYD | 2006-02-15 04:34:33 |

| 93 | ELLEN | PRESLEY | 2006-02-15 04:34:33 |

| 94 | KENNETH | TORN | 2006-02-15 04:34:33 |

| 95 | DARYL | WAHLBERG | 2006-02-15 04:34:33 |

| 96 | GENE | WILLIS | 2006-02-15 04:34:33 |

| 97 | MEG | HAWKE | 2006-02-15 04:34:33 |

| 98 | CHRIS | BRIDGES | 2006-02-15 04:34:33 |

| 99 | JIM | MOSTEL | 2006-02-15 04:34:33 |

| 100 | SPENCER | DEPP | 2006-02-15 04:34:33 |

| 101 | SUSAN | DAVIS | 2006-02-15 04:34:33 |

| 102 | WALTER | TORN | 2006-02-15 04:34:33 |

| 103 | MATTHEW | LEIGH | 2006-02-15 04:34:33 |

| 104 | PENELOPE | CRONYN | 2006-02-15 04:34:33 |

| 105 | SIDNEY | CROWE | 2006-02-15 04:34:33 |

| 106 | GROUCHO | DUNST | 2006-02-15 04:34:33 |

| 107 | GINA | DEGENERES | 2006-02-15 04:34:33 |

| 108 | WARREN | NOLTE | 2006-02-15 04:34:33 |

| 109 | SYLVESTER | DERN | 2006-02-15 04:34:33 |

| 110 | SUSAN | DAVIS | 2006-02-15 04:34:33 |

| 111 | CAMERON | ZELLWEGER | 2006-02-15 04:34:33 |

| 112 | RUSSELL | BACALL | 2006-02-15 04:34:33 |

| 113 | MORGAN | HOPKINS | 2006-02-15 04:34:33 |

| 114 | MORGAN | MCDORMAND | 2006-02-15 04:34:33 |

| 115 | HARRISON | BALE | 2006-02-15 04:34:33 |

| 116 | DAN | STREEP | 2006-02-15 04:34:33 |

| 117 | RENEE | TRACY | 2006-02-15 04:34:33 |

| 118 | CUBA | ALLEN | 2006-02-15 04:34:33 |

| 119 | WARREN | JACKMAN | 2006-02-15 04:34:33 |

| 120 | PENELOPE | MONROE | 2006-02-15 04:34:33 |

| 121 | LIZA | BERGMAN | 2006-02-15 04:34:33 |

| 122 | SALMA | NOLTE | 2006-02-15 04:34:33 |

| 123 | JULIANNE | DENCH | 2006-02-15 04:34:33 |

| 124 | SCARLETT | BENING | 2006-02-15 04:34:33 |

| 125 | ALBERT | NOLTE | 2006-02-15 04:34:33 |

| 126 | FRANCES | TOMEI | 2006-02-15 04:34:33 |

| 127 | KEVIN | GARLAND | 2006-02-15 04:34:33 |

| 128 | CATE | MCQUEEN | 2006-02-15 04:34:33 |

| 129 | DARYL | CRAWFORD | 2006-02-15 04:34:33 |

| 130 | GRETA | KEITEL | 2006-02-15 04:34:33 |

| 131 | JANE | JACKMAN | 2006-02-15 04:34:33 |

| 132 | ADAM | HOPPER | 2006-02-15 04:34:33 |

| 133 | RICHARD | PENN | 2006-02-15 04:34:33 |

| 134 | GENE | HOPKINS | 2006-02-15 04:34:33 |

| 135 | RITA | REYNOLDS | 2006-02-15 04:34:33 |

| 136 | ED | MANSFIELD | 2006-02-15 04:34:33 |

| 137 | MORGAN | WILLIAMS | 2006-02-15 04:34:33 |

| 138 | LUCILLE | DEE | 2006-02-15 04:34:33 |

| 139 | EWAN | GOODING | 2006-02-15 04:34:33 |

| 140 | WHOOPI | HURT | 2006-02-15 04:34:33 |

| 141 | CATE | HARRIS | 2006-02-15 04:34:33 |

| 142 | JADA | RYDER | 2006-02-15 04:34:33 |

| 143 | RIVER | DEAN | 2006-02-15 04:34:33 |

| 144 | ANGELA | WITHERSPOON | 2006-02-15 04:34:33 |

| 145 | KIM | ALLEN | 2006-02-15 04:34:33 |

| 146 | ALBERT | JOHANSSON | 2006-02-15 04:34:33 |

| 147 | FAY | WINSLET | 2006-02-15 04:34:33 |

| 148 | EMILY | DEE | 2006-02-15 04:34:33 |

| 149 | RUSSELL | TEMPLE | 2006-02-15 04:34:33 |

| 150 | JAYNE | NOLTE | 2006-02-15 04:34:33 |

| 151 | GEOFFREY | HESTON | 2006-02-15 04:34:33 |

| 152 | BEN | HARRIS | 2006-02-15 04:34:33 |

| 153 | MINNIE | KILMER | 2006-02-15 04:34:33 |

| 154 | MERYL | GIBSON | 2006-02-15 04:34:33 |

| 155 | IAN | TANDY | 2006-02-15 04:34:33 |

| 156 | FAY | WOOD | 2006-02-15 04:34:33 |

| 157 | GRETA | MALDEN | 2006-02-15 04:34:33 |

| 158 | VIVIEN | BASINGER | 2006-02-15 04:34:33 |

| 159 | LAURA | BRODY | 2006-02-15 04:34:33 |

| 160 | CHRIS | DEPP | 2006-02-15 04:34:33 |

| 161 | HARVEY | HOPE | 2006-02-15 04:34:33 |

| 162 | OPRAH | KILMER | 2006-02-15 04:34:33 |

| 163 | CHRISTOPHER | WEST | 2006-02-15 04:34:33 |

| 164 | HUMPHREY | WILLIS | 2006-02-15 04:34:33 |

| 165 | AL | GARLAND | 2006-02-15 04:34:33 |

| 166 | NICK | DEGENERES | 2006-02-15 04:34:33 |

| 167 | LAURENCE | BULLOCK | 2006-02-15 04:34:33 |

| 168 | WILL | WILSON | 2006-02-15 04:34:33 |

| 169 | KENNETH | HOFFMAN | 2006-02-15 04:34:33 |

| 170 | MENA | HOPPER | 2006-02-15 04:34:33 |

| 171 | OLYMPIA | PFEIFFER | 2006-02-15 04:34:33 |

| 172 | GROUCHO | WILLIAMS | 2006-02-15 04:34:33 |

| 173 | ALAN | DREYFUSS | 2006-02-15 04:34:33 |

| 174 | MICHAEL | BENING | 2006-02-15 04:34:33 |

| 175 | WILLIAM | HACKMAN | 2006-02-15 04:34:33 |

| 176 | JON | CHASE | 2006-02-15 04:34:33 |

| 177 | GENE | MCKELLEN | 2006-02-15 04:34:33 |

| 178 | LISA | MONROE | 2006-02-15 04:34:33 |

| 179 | ED | GUINESS | 2006-02-15 04:34:33 |

| 180 | JEFF | SILVERSTONE | 2006-02-15 04:34:33 |

| 181 | MATTHEW | CARREY | 2006-02-15 04:34:33 |

| 182 | DEBBIE | AKROYD | 2006-02-15 04:34:33 |

| 183 | RUSSELL | CLOSE | 2006-02-15 04:34:33 |

| 184 | HUMPHREY | GARLAND | 2006-02-15 04:34:33 |

| 185 | MICHAEL | BOLGER | 2006-02-15 04:34:33 |

| 186 | JULIA | ZELLWEGER | 2006-02-15 04:34:33 |

| 187 | RENEE | BALL | 2006-02-15 04:34:33 |

| 188 | ROCK | DUKAKIS | 2006-02-15 04:34:33 |

| 189 | CUBA | BIRCH | 2006-02-15 04:34:33 |

| 190 | AUDREY | BAILEY | 2006-02-15 04:34:33 |

| 191 | GREGORY | GOODING | 2006-02-15 04:34:33 |

| 192 | JOHN | SUVARI | 2006-02-15 04:34:33 |

| 193 | BURT | TEMPLE | 2006-02-15 04:34:33 |

| 194 | MERYL | ALLEN | 2006-02-15 04:34:33 |

| 195 | JAYNE | SILVERSTONE | 2006-02-15 04:34:33 |

| 196 | BELA | WALKEN | 2006-02-15 04:34:33 |

| 197 | REESE | WEST | 2006-02-15 04:34:33 |

| 198 | MARY | KEITEL | 2006-02-15 04:34:33 |

| 199 | JULIA | FAWCETT | 2006-02-15 04:34:33 |

| 200 | THORA | TEMPLE | 2006-02-15 04:34:33 |

+----------+-------------+--------------+---------------------+

200 rows in set (0.05 sec)

mysql>

show databases;

use mysql;

show tables;

use sakila;

show tables;

select \* from actor;

quit;

1. Using the program/interface given by RDBMS Developer

CREATE DEFINER=`root`@`localhost` PROCEDURE `film\_in\_stock`(IN p\_film\_id INT, IN p\_store\_id INT, OUT p\_film\_count INT)

READS SQL DATA

BEGIN

SELECT inventory\_id

FROM inventory

WHERE film\_id = p\_film\_id

AND store\_id = p\_store\_id

AND inventory\_in\_stock(inventory\_id);

SELECT FOUND\_ROWS() INTO p\_film\_count;

END

SQL (Structured Query Language)

1. In order to interact to RDBMS , SQL is the standard way
2. DDL,DML,TCL, etc., commands to perform different operations
3. The standard Operations in RDBMS is CRUD (Create/Insert, Read/Retrieve, Update/Edit & Delete)
4. Using different SQL commands we will create a query.

SELECT \* FROM sakila.actor;

INSERT INTO `sakila`.`actor` (`actor\_id`, `first\_name`, `last\_name`, `last\_update`) VALUES ('201', 'ABC', 'XYZ', '2006-02-15 04:34:33');

UPDATE `sakila`.`actor` SET `first\_name`='MATTHEW123' WHERE `actor\_id`='8';

DELETE FROM `sakila`.`actor` WHERE `actor\_id`='201';

Student

Stu\_id,stu\_name,stu\_email,stu\_mobile

CREATE TABLE `sakila`.`student` (

`stu\_id` INT NOT NULL,

`stu\_name` VARCHAR(45) NOT NULL,

`stu\_email` VARCHAR(150) NULL,

`stu\_mobile` BIGINT(10) NULL,

PRIMARY KEY (`stu\_id`));

1. DDL,DML,TCL commands
2. Various clause in SQL commands
3. Single & multi row functions in SQL commands
4. Sub query

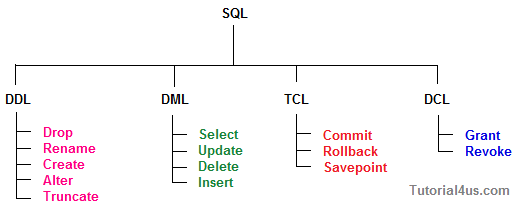
Final Project Submission.

Zip file with following content

War (Java Web Project + queries.sql + readme.txt(admin credentials, project team member details)

Zip file name : ProjectName\_Optum\_Hyd\_2018

1. DDL,DML,TCL commands



1. Various clause in SQL commands

Select \* from <table\_name> - simple select query

Select \* from <table\_name> where <condition> - filtered select query

Select \* from sakila.actor where actor\_id> 100;

Select \* from sakila.actor where actor\_id between 170 and 190;

Select \* from sakila.actor where first\_name like 'A%';

Select \* from sakila.actor where first\_name like 'W%' or first\_name like 'S%' or first\_name like 'A%';

Select \* from sakila.actor where first\_name like 'W%' and last\_name like 'H%';

select count(\*) from sakila.address;

select count(address\_id) total\_address,city\_id from sakila.address group by city\_id;

SELECT \* FROM sakila.address order by city\_id;

SELECT \* FROM sakila.address order by district;

SELECT \* FROM sakila.address order by district desc;

Count(), max(), min(), round(),sqrt(), pow()

Length(), substr(), strcmp()

upper(),lower()

distinct(),

select upper(district) from sakila.address; - Single Row Function

Sub –Query

1. Query with in a query

select \* from sakila.address where postal\_code in (select postal\_code from sakila.address where length(postal\_code) > 4)

In RDBMS Main Entity is Table.

View, Index, Stored Procedure, Function, Trigger, Sequence and Synonym

PL/SQL – Programming Lang for SQL

Declare : (Optional)

Begin :

End :

Stored Procedure

Create or replace procedure <procedure\_name>([parameters IN|OUT|IN OUT datatype,…]) AS

Begin:

End <procedure\_name>;

Create or replace function < function \_name>([parameters IN|OUT|IN OUT datatype,…])

Return datatype

{AS|IS}

Begin:

End < function\_name>;

Dbms\_output.put\_line(); -- output statement in PL/SQL

|| - concatenation operator

:= to assign value to variables

CREATE or REPLACE PROCEDURE `film\_in\_stock`(IN p\_film\_id INT, IN p\_store\_id INT, OUT p\_film\_count INT)

READS SQL DATA

BEGIN

SELECT inventory\_id

FROM inventory

WHERE film\_id = p\_film\_id

AND store\_id = p\_store\_id

AND inventory\_in\_stock(inventory\_id);

SELECT FOUND\_ROWS() INTO p\_film\_count;

END

CREATE PROCEDURE `insert\_actor` (IN id smallint,

IN fname varchar(25),

IN lname varchar(25),

IN updatedon timestamp)

BEGIN

insert into sakila.actor values (id,fname,lname,updatedon);

select '1 record inserted';

END

USE `sakila`;

DROP procedure IF EXISTS `insert\_actor`;

DELIMITER $$

USE `sakila`$$

CREATE PROCEDURE `insert\_actor` (IN id smallint,

IN fname varchar(25),

IN lname varchar(25),

IN updatedon timestamp)

BEGIN

insert into sakila.actor values (id,fname,lname,updatedon);

select '1 record inserted';

END$$

DELIMITER ;

Calling stored\_procedure

CALL `sakila`.`insert\_actor`('202','ABC','xyz','2018-07-23 14:14:33');

CREATE DEFINER=`root`@`localhost` PROCEDURE `total\_countries`(out total\_country int)

BEGIN

select count(\*) into total\_country FROM world.country where name like 'I%';

select 'result '+total\_country;

END

CALL `world`.`total\_countries`(@total);

CREATE DEFINER=`root`@`localhost` FUNCTION `find\_cube`(p\_input int)

RETURNS int(11)

BEGIN

RETURN p\_input\*p\_input\*p\_input;

END

select `sakila`.`find\_cube`(3);

Triggers & Sequences in Mysql

Create sequence <seq\_name> [start with <start\_value>] [increment by <increment\_value>] [cache|no cache] [cycle|no cycle]

When we use Auto\_increment for any field of a table, mysql will automatically create a sequence.

CREATE DEFINER = CURRENT\_USER TRIGGER `sakila`.`student\_BEFORE\_INSERT`

BEFORE UPDATE ON `student`

FOR EACH ROW

BEGIN

IF (old.stu\_id != null)

then insert into student (stu\_id,stu\_name,stu\_email,stu\_mobile)

values (old.stu\_id,new.stu\_name,new.stu\_email,new.stu\_mobile);

end if;

END