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Database Management and Database Design INFO6210

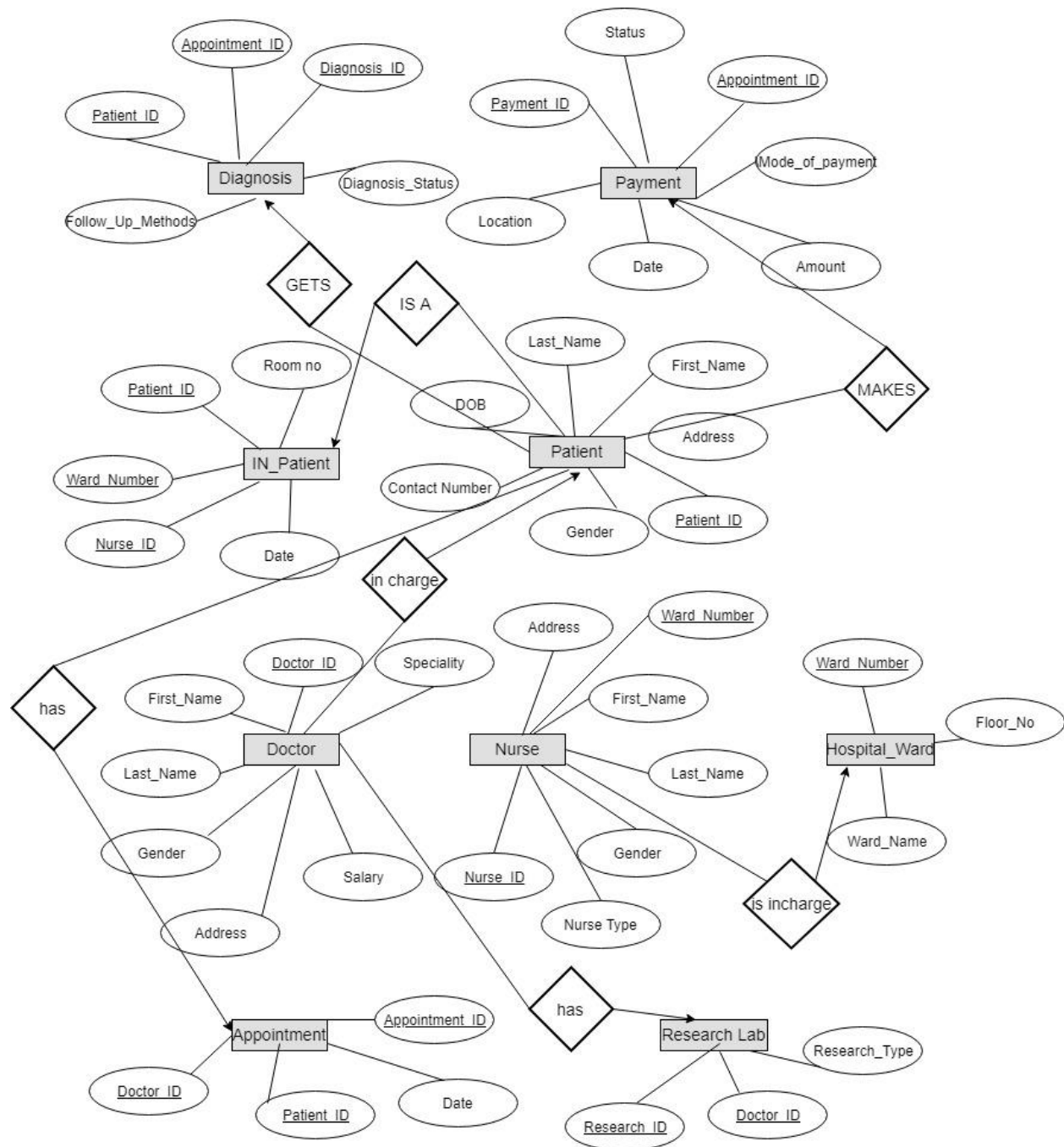
Prof. Yusuf Ozbek

Date:12/12/2018

**DATABASE FOR BOSTON MEDICAL HOSPITAL**

Designing a database for any system include many problems like capturing all the features of an essential Hospital, modeling the entities and objects, designing the relationship between objects etc. The database is a very vast potential. It can be grown more than this final project. Through this project, we are including the basic features any hospital would need, like storing and manipulating the details of scheduling appointments, doctors, patients, nurses, research details, payment etc.

ER Diagram:



Normalization:

1. Table Hospital\_Ward

Result Grid			
	Ward_Number	Ward_Name	Floor_Number
▶	WA01	Accident Ward	1
	WA02	Maternity Ward	2
	WA03	General Ward	2
	WA04	Psychiatric Ward	3
	WA05	Emergency Ward	4
	WA06	ICU Ward	3
	WA07	Cardiology Ward	4
*	NULL	NULL	NULL

Clearly the table satisfies 1NF,2NF,3NF,BCNF,4NF

2.Table Doctor:

Result Grid								
	Doctor_ID	First_Name	Last_Name	Gender	Specialty	Address	Salary	PhoneNumber
▶	DO01	Sindhiya	Nikhitha	F	Cardiologist	Boston, MA	197000	857869784
	DO02	Oliver	Turner	M	Hematologist	San Diego ,California	162000	768209101
	DO03	Harper	Martinez	F	Hospitalist	Queens, New York	292000	765667627
	DO04	Charlotte	Campbell	F	Medical Geneticist	Los Angeles, California	266000	765725879
	DO05	Kim	Hernandez	M	Gynecologist	Chicago,IL	219000	654758719
	DO06	Emily	Parker	F	Neonatologist	LA, California	162000	657369187
	DO07	Michael	Rodriguez	M	Nephrologist	Houston, Texas	431000	90166892
	DO08	Mia	Garcia	F	Pediatrician	Phoenix, Arizona	225000	987654356
	DO09	David	Collins	M	Pathologist	Boston, MA	262000	34567898

Clearly the table satisfies 1NF,2NF,3NF,BCNF,4NF

3.Table Patient

Result Grid							
	Patient_ID	First_Name	Last_Name	Gender	Date_Of_Birth	Address	Contact_No
▶	PA01	EDWARDS	RIVERA	M	1995-07-12	Arizona	2515469442
	PA02	MITCHELL	Jolie	F	1980-09-28	Tempe	1255464478
	PA03	GOMEZ	Johansson	F	1972-10-18	Michigan	9495694371
	PA04	Anne	ROBINSON	F	1976-09-28	Indiana	2269062721
	PA05	ALLEN	Depp	M	1990-09-18	Idaho	6719251352
	PA06	MURPHY	Homes	M	1994-05-15	Louisiana	6304468851
	PA07	Kevin	SCOTT	M	1984-05-16	Vegas	2376449244
	PA08	ROBERTS	Washington	M	1984-02-07	IL	1597794578
	PA09	Natalie	TURNER	F	1989-03-25	Colorado	4077327516

Clearly the table satisfies 1NF,2NF,3NF,BCNF,4NF

4.Table Nurse

Result Grid							
		Filter Rows:		Edit:		Export/Import:	
	Nurse_ID	First_Name	Last_Name	Gender	Address	Ward_Number	Nurse_Type
▶	NU01	Thomas	Smith	M	Kansas	WA01	Head
	NU02	Emma	Taylor	F	Idaho	WA01	General
	NU03	Liam	Johnson	M	Louisiana	WA02	Head
	NU04	Olivia	Jones	F	Colorado	WA03	Head
	NU05	Jacob	Brown	M	Vegas	WA04	Head
	NU06	Ava	Miller	F	Kansas	WA02	General
	NU07	Ethan	Moore	M	Houston	WA05	General
	NU08	Isabella	Thomas	F	Kansas	WA04	General
	NU09	Williams	Taylor	M	Indiana	WA06	General

Clearly the table satisfies 1NF,2NF,3NF,BCNF.

#### 5.Table IN\_Patient

	Admission_ID	Patient_ID	Ward_Number	Nurse_ID	Admitted_Date_Time	Room_No
▶	IP001	PA03	WA01	NU09	2017-01-01 09:26:17	221
	IP002	PA08	WA02	NU08	2018-02-12 01:15:15	311
	IP003	PA06	WA04	NU07	2017-02-05 02:45:35	220
	IP004	PA01	WA02	NU01	2018-03-11 09:25:35	301
	IP005	PA10	WA04	NU06	2016-04-05 20:15:25	201
	IP006	PA07	WA03	NU02	2016-04-05 20:15:25	202
✱	NULL	NULL	NULL	NULL	NULL	NULL

Clearly the table satisfies 1NF,2NF,3NF,BCNF,4NF

#### 6.Table Schedule\_Appointment

	Appointment_ID	Patient_ID	Doctor_ID	Appointment_Date_Time
▶	A001	PA01	DO10	2018-12-10 08:30:00
	A002	PA02	DO09	2018-12-09 10:30:00
	A003	PA03	DO05	2018-12-11 11:30:00
	A004	PA04	DO05	2018-12-12 12:30:00
	A005	PA05	DO05	2018-12-13 12:30:00
	A006	PA06	DO07	2018-12-14 12:00:00
	A007	PA07	DO06	2018-11-07 13:00:00
	A008	PA08	DO08	2018-11-06 14:00:00
	A009	PA09	DO02	2018-11-14 15:00:00
	A010	PA10	DO02	2018-11-16 16:00:00

Clearly the table satisfies 1NF,2NF,3NF,BCNF,4NF

#### 7.Table Diagnosis

	Diagnosis_ID	Appointment_ID	Patient_ID	Diagnosis_Status	Follow_Up_Methods
▶	DS001	A001	PA01	Coronary Artery Disease	CT Scan
	DS002	A002	PA02	Stroke	Medication
	DS003	A002	PA02	Stroke	Bed rest
	DS004	A004	PA04	Trachea	Injection Course
	DS005	A005	PA05	Infections	MRI
	DS006	A006	PA06	Diabetes	Injection Course
	DS007	A007	PA07	Fever	Medication
	DS008	A008	PA08	Heart Disease	CT Scan
	DS009	A009	PA09	Fever	Medication
	DS010	A010	PA10	Diarrhea	Medication
	DS011	A001	PA01	Coronary Artery Disease	CT Scan

Clearly the table satisfies 1NF,2NF,3NF,BCNF,4NF

## 8.Table Payment

	Payment_ID	Appointment_ID	Payment_Mode	Transaction_DateTime	Transaction_Status	Transaction_Location	Total_Cost
▶	TR001	A001	Cash	2018-01-01 05:13:00	PAID	Boston	12000
	TR002	A002	Check	2018-01-05 14:13:00	PAID	Ohio	78000
	TR003	A003	Debit Card	2017-01-14 09:00:00	NOT PAID	Houston	8000
	TR004	A004	Check	2018-01-01 13:21:00	NOT PAID	IL	20500
	TR005	A005	Credit Card	2018-11-01 09:12:00	NOT PAID	Chicago	200
	TR006	A006	Check	2018-01-09 07:10:00	NOT PAID	India	450
	TR007	A007	Debit Card	2017-01-12 18:02:00	PAID	Detroit	2000
	TR008	A008	Cash	2017-01-11 11:11:00	PAID	Colorado	3000
	TR009	A009	Credit Card	2018-01-12 14:00:00	PAID	NY	5000
	TR010	A010	Cash	2018-01-14 11:23:59	NOT PAID	Vegas	28000
	TR011	A001	Cash	2018-01-16 00:00:00	PAID	IL	20500

Clearly the table satisfies 1NF,2NF,3NF,BCNF.

## 9.Table Research\_Lab

	Research_ID	Doctor_ID	Research_Type
▶	RL01	DO01	Cancer
	RL02	DO03	Cardiology
	RL03	DO04	Micro Biology
	RL04	DO09	Nano Technology
	RL05	DO05	Molecular Biology
*	NULL	NULL	NULL

Clearly the table satisfies 1NF,2NF,3NF,BCNF,4NF

## VIEWS:

1.Patient details with their diagnosis and followups

```

CREATE
  ALGORITHM = UNDEFINED
  DEFINER = `root`@`localhost`
  SQL SECURITY DEFINER
VIEW `hospital`.`patient_diagnosis` AS
  SELECT
    CONCAT(`p`.`First_Name`, `p`.`Last_Name`) AS `Patient Name`,
    `d`.`Diagnosis_Status` AS `Diagnosis_Status`,
    `d`.`Follow_Up_Methods` AS `Follow Ups`
  FROM
    (`hospital`.`patient` `p`
    JOIN `hospital`.`diagnosis` `d` ON ((`d`.`Patient_ID` = `p`.`Patient_ID`)))

```

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

	Patient Name	Diagnosis_Status	Follow Ups
▶	EDWARDSRIVERA	Coronary Artery Disease	CT Scan
	MITCHELLJolie	Stroke	Medication
	MITCHELLJolie	Stroke	Bed rest
	GOMEZJohansson	Pregnancy	5 Weeks
	GOMEZJohansson	High blood pressure	Blood test
	GOMEZJohansson	Headache	Medication
	AnneROBINSON	Trachea	Injection Course
	ALLENDupp	Infections	MRI
	MURPHYHomes	Diabetes	Injection Course
	KevinSCOTT	Fever	Medication
	KevinSCOTT	Infections	X-Ray

2.To reschedule a doctor's appointment

```

CREATE
  ALGORITHM = UNDEFINED
  DEFINER = `root`@`localhost`
  SQL SECURITY DEFINER
VIEW `hospital`.`appointment_reschedule` AS
  SELECT
    (`hospital`.`schedule_appointment`.`Appointment_Date_Time` + INTERVAL 3 DAY) AS `DATE_ADD`,
  FROM
    `hospital`.`schedule_appointment`
  WHERE
    (`hospital`.`schedule_appointment`.`Doctor_ID` = (SELECT
      `hospital`.`doctor`.`Doctor_ID`
    FROM
      `hospital`.`doctor`
    WHERE
      ((`hospital`.`doctor`.`First_Name` = 'David')
      AND (`hospital`.`doctor`.`Last_Name` = 'Collins'))))

```

Result Grid	Filter Rows:	Expo
DATE_ADD(Appointment_Date_Time,INTERVAL 3 DAY)		
2018-12-12 10:30:00		

### 3.Details of IN\_Patient

```

DEFINER = `root`@`localhost`
SQL SECURITY DEFINER
VIEW `hospital`.`inpatientdetails` AS
SELECT
  `i`.`Patient_ID` AS `Patient ID`,
  `p`.`First_Name` AS `First Name`,
  `p`.`Last_Name` AS `Last Name`,
  `w`.`Ward_Name` AS `Ward Name`,
  `w`.`Ward_Number` AS `Ward Number`,
  `n`.`First_Name` AS `Nurse First Name`,
  `n`.`Last_Name` AS `Nurse Last Name`,
  `w`.`Floor_Number` AS `Floor Number`
FROM
  (((`hospital`.`in_patient` `i`
  JOIN `hospital`.`patient` `p` ON ((`i`.`Patient_ID` = `p`.`Patient_ID`)))
  JOIN `hospital`.`hospital_ward` `w` ON ((`i`.`Ward_Number` = `w`.`Ward_Number`)))
  JOIN `hospital`.`nurse` `n` ON ((`i`.`Nurse_ID` = `n`.`Nurse_ID`)))

```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	Patient ID	First Name	Last Name	Ward Name	Ward Number	Nurse First Name	Nurse Last Name	Floor Number
▶	PA03	GOMEZ	Johansson	Accident Ward	WA01	Williams	Taylor	1
	PA08	ROBERTS	Washington	Maternity Ward	WA02	Isabella	Thomas	2
	PA01	EDWARDS	RIVERA	Maternity Ward	WA02	Thomas	Smith	2
	PA07	Kevin	SCOTT	General Ward	WA03	Emma	Taylor	2
	PA06	MURPHY	Homes	Psychiatric Ward	WA04	Ethan	Moore	3
	PA10	Tom	BAKER	Psychiatric Ward	WA04	Ava	Miller	3

### 4.List of Doctors getting amount of revenue to hospital based on appointment fees



```

1 CREATE
2     ALGORITHM = UNDEFINED
3     DEFINER = `root`@`localhost`
4     SQL SECURITY DEFINER
5     VIEW `hospital`.`doctor_with_max_revenue` AS
6     SELECT
7         CONCAT(`d`.`First_Name`, `d`.`Last_Name`) AS `Doctor_Name`,
8         SUM(`p`.`Total_Cost`) AS `Revenue`
9     FROM
10        ((`hospital`.`payment` `p`
11         JOIN `hospital`.`schedule_appointment` `a` ON ((`a`.`Appointment_ID` = `p`.`Appointment_ID`
12         JOIN `hospital`.`doctor` `d` ON ((`d`.`Doctor_ID` = `a`.`Doctor_ID`))))
13     GROUP BY `d`.`First_Name`
14     ORDER BY `p`.`Total_Cost`

```

	Doctor_Name	Revenue
▶	MichaelRodriguez	450
	EmilyParker	2000
	MiaGarcia	3000
	OliverTurner	33000
	KimHernandez	28700
	AbigailStewart	32000
	David Collins	78000

5.List of doctors not in research

```

1 CREATE
2     ALGORITHM = UNDEFINED
3     DEFINER = `root`@`localhost`
4     SQL SECURITY DEFINER
5     VIEW `hospital`.`doctor_not_in_research` AS
6     SELECT
7         CONCAT(`hospital`.`doctor`.`First_Name`,
8         `hospital`.`doctor`.`Last_Name`) AS `Doctor_Name`
9     FROM
10        `hospital`.`doctor`
11     WHERE
12        (NOT (`hospital`.`doctor`.`Doctor_ID` IN (SELECT
13        `hospital`.`research_lab`.`Doctor_ID`
14        FROM
15        `hospital`.`research_lab`))))

```

Result Grid	
Doctor_Name	
▶ OliverTurner	
EmilyParker	
MichaelRodriguez	
MiaGarcia	
AbigailStewart	

6.Amount paid to the hospital by each patient

```
CREATE
  ALGORITHM = UNDEFINED
  DEFINER = `root`@`localhost`
  SQL SECURITY DEFINER
VIEW `hospital`.`amount_paid_by_patient` AS
  SELECT
    SUM(`p`.`Total_Cost`) AS `total_amount`,
    `a`.`Patient_ID` AS `Patient_ID`
  FROM
    (`hospital`.`payment` `p`
  JOIN `hospital`.`schedule_appointment` `a`)
  WHERE
    ((`a`.`Appointment_ID` = `p`.`Appointment_ID`)
    AND `a`.`Patient_ID` IN (SELECT
      `hospital`.`patient`.`Patient_ID`
    FROM
      `hospital`.`patient`))
  GROUP BY `a`.`Patient_ID`
```



	total_amount	Patient_ID
▶	32000	PA01
	78000	PA02
	8000	PA03
	20500	PA04
	200	PA05
	450	PA06
	2000	PA07
	3000	PA08
	5000	PA09
	28000	PA10

7.Patients having fever

```

VIEW `hospital`.`patient_with_fever` AS
SELECT
  `hospital`.`patient`.`First_Name` AS `First_Name`,
  `hospital`.`patient`.`Last_Name` AS `Last_Name`
FROM
  `hospital`.`patient`
WHERE
  `hospital`.`patient`.`Patient_ID` IN (SELECT
    `hospital`.`schedule_appointment`.`Patient_ID`
    FROM
      `hospital`.`schedule_appointment`
    WHERE
      `hospital`.`schedule_appointment`.`Appointment_ID` IN (SELECT
        `hospital`.`diagnosis`.`Appointment_ID`
        FROM
          `hospital`.`diagnosis`
        WHERE
          (`hospital`.`diagnosis`.`Diagnosis Status` = 'Fever'))))

```

Result Grid |   Filter Rows:

First_Name	Last_Name
Kevin	SCOTT
Natalie	TURNER

## 8.OutPatient List

```

CREATE
  ALGORITHM = UNDEFINED
  DEFINER = `root`@`localhost`
  SQL SECURITY DEFINER
VIEW `hospital`.`outpatient` AS
SELECT
  CONCAT(`p`.`First_Name`, ' ', `p`.`Last_Name`) AS `OutPatient_List`
FROM
  `hospital`.`patient` `p`
WHERE
  (NOT (`p`.`Patient_ID` IN (SELECT
    `hospital`.`in_patient`.`Patient_ID`
    FROM
      `hospital`.`in_patient`)))

```

1 `SELECT * FROM hospital.outpatient;`

Result Grid | Filter Rows: | Export: | Wrap C

OutPatient_List
MITCHELL Jolie
Anne ROBINSON
ALLEN Depp
Natalie TURNER

## STORED PROCEDURES:

### 1. Getting the amount paid per patient

```

CREATE DEFINER='root'@'localhost' PROCEDURE `Max_Payment_Made_By_Patient` (IN first_name VARCHAR(255))
BEGIN
    SELECT t.Total_Cost, p.First_Name AS Max_Payment_Made_By_Patient FROM Payment t
    JOIN Schedule_Appointment a ON t.Appointment_ID=a.Appointment_ID
    JOIN Patient p ON p.Patient_ID=a.Patient_ID
    WHERE p.First_Name=first_name;
END

```

1 `call hospital.Max_Payment_Made_By_Patient('anne');`  
 2

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

Total_Cost	Max_Payment_Made_By_Patient
20500	Anne

## 2.Number of appointments made by a patient

```
CREATE DEFINER=`root`@`localhost` PROCEDURE `no_of_appointments`  
(IN fn VARCHAR(20),in ln VARCHAR(20))  
BEGIN  
SELECT count(*) AS Appointment_Count,CONCAT(p.First_name,' ',p.Last_Name) AS Patient_Name from Sc  
JOIN Patient p ON a.Patient_ID=p.Patient_ID  
WHERE p.First_Name=fn AND p.Last_Name=ln  
GROUP BY a.Patient_ID;  
END
```

Limit to 1000 rows

```
1 call hospital.no_of_appointments('allen', 'depp');  
2
```

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

	Appointment_Count	Patient_Name
1	1	ALLEN Depp

## 3.Number of nurses per ward

```
1 CREATE DEFINER=`root`@`localhost` PROCEDURE `nurses_Per_ward` (IN ward_num VARCHAR(10) )  
2 BEGIN  
3 SELECT h.Ward_Name,COUNT(*) AS Nurse_Count  
4 FROM Nurse n  
5 JOIN Hospital_Ward h ON n.Ward_Number=h.Ward_Number  
6 where h.Ward_number=ward_num;  
7 END
```

Limit to 1000 rows

```

1  call hospital.nurses_Per_ward('WA01');
2

```

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

Ward_Name	Nurse_Count
Accident Ward	2

#### 4. Patient count gender wise

```

CREATE DEFINER=`root`@`localhost` PROCEDURE `Patient_Gender_Count`(IN TOTAL varchar(10))
BEGIN
SELECT COUNT(Admission_ID) AS Patient_COUNT
FROM IN_Patient
WHERE Patient_ID IN(
SELECT Patient_ID FROM Patient
WHERE Gender=TOTAL
);
END

```

Limit to 1000 rows

```

1  call hospital.Patient_Gender_Count('M');
2

```

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

Patient_COUNT
5

Limit to 1000 rows

```

1 • call hospital.Patient_Gender_Count('F');
2

```

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

Patient_COUNT
1

5. List of patients transaction status wise

```

1 CREATE DEFINER='root'@'localhost' PROCEDURE `patient_bill`(in tran_status varchar(25))
2 BEGIN
3 select CONCAT(p.First_name, ' ', p.Last_Name) AS Patient_Name from Patient p
4 join schedule_appointment a on a.Patient_ID=p.Patient_ID
5 join Payment t on t.Appointment_ID=a.Appointment_ID
6 where Transaction_Status=tran_status;
7 END

```

Limit to 1000 rows

```

1 call hospital.patient_bill('paid');
2

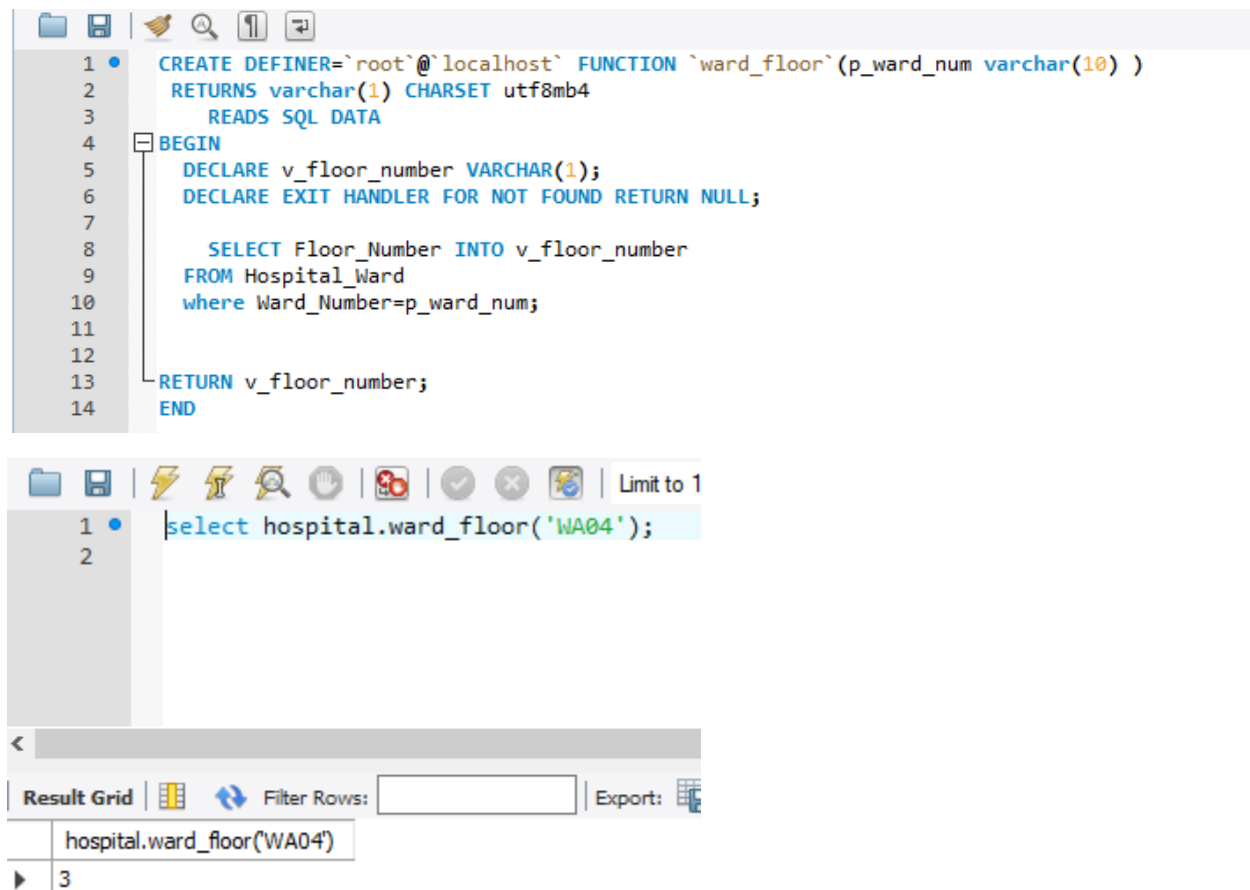
```

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

Patient_Name
EDWARDS RIVERA
EDWARDS RIVERA
MITCHELL Jolie
Kevin SCOTT
ROBERTS Washington
Natalie TURNER

**FUNCTIONS:**

1. Given ward number, find out which floor it is in



The screenshot shows a SQL IDE with two panels. The top panel contains the SQL code for creating a function named 'ward\_floor'. The bottom panel shows the execution of a query to call this function with the argument 'WA04', resulting in the value '3'.

```
1 CREATE DEFINER=`root`@`localhost` FUNCTION `ward_floor`(p_ward_num varchar(10) )
2 RETURNS varchar(1) CHARSET utf8mb4
3 READS SQL DATA
4 BEGIN
5     DECLARE v_floor_number VARCHAR(1);
6     DECLARE EXIT HANDLER FOR NOT FOUND RETURN NULL;
7
8     SELECT Floor_Number INTO v_floor_number
9     FROM Hospital_Ward
10    where Ward_Number=p_ward_num;
11
12
13 RETURN v_floor_number;
14 END
```

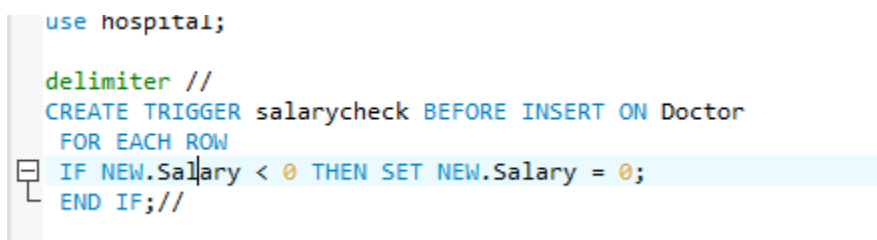
```
1 select hospital.ward_floor('WA04');
2
```

Result Grid

hospital.ward_floor('WA04')
3

## TRIGGERS:

1. Trigger to check the value of salary before inserting

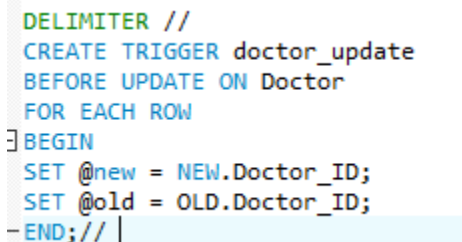


The screenshot shows a SQL IDE with a single panel containing the SQL code for creating a trigger named 'salarycheck'.

```
use hospital;

delimiter //
CREATE TRIGGER salarycheck BEFORE INSERT ON Doctor
FOR EACH ROW
IF NEW.Salary < 0 THEN SET NEW.Salary = 0;
END IF; //
```

2. getting the old and new values after updating the table



The screenshot shows a SQL IDE with a single panel containing the SQL code for creating a trigger named 'doctor\_update'.

```
DELIMITER //
CREATE TRIGGER doctor_update
BEFORE UPDATE ON Doctor
FOR EACH ROW
BEGIN
SET @new = NEW.Doctor_ID;
SET @old = OLD.Doctor_ID;
END; //
```



## **APPENDIX:**

```
-- MySQL dump 10.13 Distrib 8.0.12, for Win64 (x86_64)

--

-- Host: localhost Database: hospital
--
-----
-- Server version      8.0.12

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
SET NAMES utf8 ;
/*!40103 SET @OLD_TIME_ZONE=@@TIME_ZONE */;
/*!40103 SET TIME_ZONE='+00:00' */;
/*!40014 SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0 */;
/*!40014 SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0 */;
/*!40101 SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='NO_AUTO_VALUE_ON_ZERO' */;
/*!40111 SET @OLD_SQL_NOTES=@@SQL_NOTES, SQL_NOTES=0 */;

--

-- Temporary view structure for view `amount_paid_by_patient`
--

DROP TABLE IF EXISTS `amount_paid_by_patient`;
/*!50001 DROP VIEW IF EXISTS `amount_paid_by_patient` */;
SET @saved_cs_client = @@character_set_client;
SET character_set_client = utf8mb4;
/*!50001 CREATE VIEW `amount_paid_by_patient` AS SELECT
1 AS `total_amount`,
```

```

1 AS `Patient_ID`*/;

SET character_set_client = @saved_cs_client;


--

-- Temporary view structure for view `appointment_reschedule`
--


DROP TABLE IF EXISTS `appointment_reschedule`;

/*!50001 DROP VIEW IF EXISTS `appointment_reschedule`*/;

SET @saved_cs_client = @@character_set_client;

SET character_set_client = utf8mb4;

/*!50001 CREATE VIEW `appointment_reschedule` AS SELECT

1 AS `DATE_ADD(Appointment_Date_Time,INTERVAL 3 DAY)`*/;

SET character_set_client = @saved_cs_client;


--

-- Table structure for table `diagnosis`
--


DROP TABLE IF EXISTS `diagnosis`;

/*!40101 SET @saved_cs_client = @@character_set_client */;

SET character_set_client = utf8mb4 ;

CREATE TABLE `diagnosis` (

`Diagnosis_ID` varchar(10) NOT NULL,

`Appointment_ID` varchar(10) NOT NULL,

`Patient_ID` varchar(10) NOT NULL,

`Diagnosis_Status` varchar(100) NOT NULL,

`Follow_Up_Methods` varchar(100) NOT NULL,

PRIMARY KEY (`Diagnosis_ID`),

```

```

KEY `Appointment_ID` (`Appointment_ID`),

KEY `Patient_ID` (`Patient_ID`),

CONSTRAINT `diagnosis_ibfk_1` FOREIGN KEY (`Appointment_ID`) REFERENCES
`schedule_appointment` (`appointment_id`),

CONSTRAINT `diagnosis_ibfk_2` FOREIGN KEY (`Patient_ID`) REFERENCES `patient` (`patient_id`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `diagnosis`
--

LOCK TABLES `diagnosis` WRITE;

/*!40000 ALTER TABLE `diagnosis` DISABLE KEYS */;

INSERT INTO `diagnosis` VALUES ('DS001','A001','PA01','Coronary Artery Disease','CT
Scan'),('DS002','A002','PA02','Stroke','Medication'),('DS003','A002','PA02','Stroke','Bed
rest'),('DS004','A004','PA04','Trachea','Injection
Course'),('DS005','A005','PA05','Infections','MRI'),('DS006','A006','PA06','Diabetes','Injection
Course'),('DS007','A007','PA07','Fever','Medication'),('DS008','A008','PA08','Heart Disease','CT
Scan'),('DS009','A009','PA09','Fever','Medication'),('DS010','A010','PA10','Diarrhea','Medication'),('DS011
','A003','PA03','Pregnancy','5 Weeks'),('DS012','A003','PA03','High blood pressure','Blood
test'),('DS013','A003','PA03','Headache','Medication'),('DS014','A007','PA07','Infections','X-
Ray'),('DS015','A007','PA07','Headache','Medication');

/*!40000 ALTER TABLE `diagnosis` ENABLE KEYS */;

UNLOCK TABLES;

--
-- Table structure for table `doctor`
--

DROP TABLE IF EXISTS `doctor`;

/*!40101 SET @saved_cs_client = @@character_set_client */;

```

```

SET character_set_client = utf8mb4 ;

CREATE TABLE `doctor` (
  `Doctor_ID` varchar(8) NOT NULL,
  `First_Name` varchar(25) NOT NULL,
  `Last_Name` varchar(25) NOT NULL,
  `Gender` varchar(1) NOT NULL,
  `Specialty` varchar(25) NOT NULL,
  `Address` varchar(25) NOT NULL,
  `Salary` varchar(15) NOT NULL,
  `PhoneNumber` int(15) NOT NULL,
  PRIMARY KEY (`Doctor_ID`),
  KEY `idx_lastname` (`Last_Name`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;

/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `doctor`
--

LOCK TABLES `doctor` WRITE;

/*!40000 ALTER TABLE `doctor` DISABLE KEYS */;

INSERT INTO `doctor` VALUES ('DO01','Sindhiya','Nikhitha','F','Cardiologist','Boston,
MA','197000',857869784),('DO02','Oliver','Turner','M','Hematologist','San Diego
,California','162000',768209101),('DO03','Harper','Martinez','F','Hospitalist','Queens, New
York','292000',765667627),('DO04','Charlotte','Campbell','F','Medical Geneticist','Los Angeles,
California','266000',765725879),('DO05','Kim','Hernandez','M','Gynecologist','Chicago,IL','219000',65475
8719),('DO06','Emily','Parker','F','Neonatologist','LA,
California','162000',657369187),('DO07','Michael','Rodriguez','M','Nephrologist','Houston,
Texas','431000',90166892),('DO08','Mia','Garcia','F','Pediatrician','Phoenix,
Arizona','225000',987654356),('DO09','David','Collins','M','Pathologist','Boston,
MA','262000',34567898),('DO10','Abigail','Stewart','F','Psychiatrist','New Orleans,
Louisiana','105000',678943588);

```

```

/*!40000 ALTER TABLE `doctor` ENABLE KEYS */;

UNLOCK TABLES;

/*!50003 SET @saved_cs_client      = @@character_set_client */;

/*!50003 SET @saved_cs_results     = @@character_set_results */;

/*!50003 SET @saved_col_connection = @@collation_connection */;

/*!50003 SET character_set_client  = utf8mb4 */;

/*!50003 SET character_set_results = utf8mb4 */;

/*!50003 SET collation_connection  = utf8mb4_0900_ai_ci */;

/*!50003 SET @saved_sql_mode       = @@sql_mode */;

/*!50003 SET sql_mode              = 'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */;

DELIMITER ;;

/*!50003 CREATE*/ /*!50017 DEFINER=`root`@`localhost`*/ /*!50003 TRIGGER `agecheck` BEFORE
INSERT ON `doctor` FOR EACH ROW IF NEW.Salary < 0 THEN SET NEW.Salary = 0;

END IF */;;

DELIMITER ;

/*!50003 SET sql_mode              = @saved_sql_mode */;

/*!50003 SET character_set_client  = @saved_cs_client */;

/*!50003 SET character_set_results = @saved_cs_results */;

/*!50003 SET collation_connection  = @saved_col_connection */;

/*!50003 SET @saved_cs_client      = @@character_set_client */;

/*!50003 SET @saved_cs_results     = @@character_set_results */;

/*!50003 SET @saved_col_connection = @@collation_connection */;

/*!50003 SET character_set_client  = utf8mb4 */;

/*!50003 SET character_set_results = utf8mb4 */;

/*!50003 SET collation_connection  = utf8mb4_0900_ai_ci */;

/*!50003 SET @saved_sql_mode       = @@sql_mode */;

/*!50003 SET sql_mode              = 'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */;

DELIMITER ;;

```

```
/*!50003 CREATE*/ /*!50017 DEFINER=`root`@`localhost`*/ /*!50003 TRIGGER `salarycheck` BEFORE  
INSERT ON `doctor` FOR EACH ROW IF NEW.Salary < 0 THEN SET NEW.Salary = 0;
```

```
END IF */;;
```

```
DELIMITER ;
```

```
/*!50003 SET sql_mode          = @saved_sql_mode */;
```

```
/*!50003 SET character_set_client = @saved_cs_client */;
```

```
/*!50003 SET character_set_results = @saved_cs_results */;
```

```
/*!50003 SET collation_connection = @saved_col_connection */;
```

```
/*!50003 SET @saved_cs_client     = @@character_set_client */;
```

```
/*!50003 SET @saved_cs_results     = @@character_set_results */;
```

```
/*!50003 SET @saved_col_connection = @@collation_connection */;
```

```
/*!50003 SET character_set_client = utf8mb4 */;
```

```
/*!50003 SET character_set_results = utf8mb4 */;
```

```
/*!50003 SET collation_connection = utf8mb4_0900_ai_ci */;
```

```
/*!50003 SET @saved_sql_mode       = @@sql_mode */;
```

```
/*!50003 SET sql_mode              = 'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */;
```

```
DELIMITER ;;
```

```
/*!50003 CREATE*/ /*!50017 DEFINER=`root`@`localhost`*/ /*!50003 TRIGGER `doc` BEFORE INSERT  
ON `doctor` FOR EACH ROW BEGIN
```

```
SET @new = NEW.Doctor_ID;
```

```
END */;;
```

```
DELIMITER ;
```

```
/*!50003 SET sql_mode          = @saved_sql_mode */;
```

```
/*!50003 SET character_set_client = @saved_cs_client */;
```

```
/*!50003 SET character_set_results = @saved_cs_results */;
```

```
/*!50003 SET collation_connection = @saved_col_connection */;
```

```
/*!50003 SET @saved_cs_client     = @@character_set_client */;
```

```
/*!50003 SET @saved_cs_results     = @@character_set_results */;
```

```

/*!50003 SET @saved_col_connection = @@collation_connection */;

/*!50003 SET character_set_client = utf8mb4 */;

/*!50003 SET character_set_results = utf8mb4 */;

/*!50003 SET collation_connection = utf8mb4_0900_ai_ci */;

/*!50003 SET @saved_sql_mode      = @@sql_mode */;

/*!50003 SET sql_mode            = 'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */;

DELIMITER ;;

/*!50003 CREATE*/ /*!50017 DEFINER=`root`@`localhost`*/ /*!50003 TRIGGER `doctor_update`
BEFORE UPDATE ON `doctor` FOR EACH ROW BEGIN

SET @new = NEW.Doctor_ID;

SET @old = OLD.Doctor_ID;

END */;;

DELIMITER ;

/*!50003 SET sql_mode            = @saved_sql_mode */;

/*!50003 SET character_set_client = @saved_cs_client */;

/*!50003 SET character_set_results = @saved_cs_results */;

/*!50003 SET collation_connection = @saved_col_connection */;

--

-- Temporary view structure for view `doctor_not_in_research`

--

DROP TABLE IF EXISTS `doctor_not_in_research`;

/*!50001 DROP VIEW IF EXISTS `doctor_not_in_research`*/;

SET @saved_cs_client      = @@character_set_client;

SET character_set_client = utf8mb4;

/*!50001 CREATE VIEW `doctor_not_in_research` AS SELECT

1 AS `Doctor_Name`*/;

SET character_set_client = @saved_cs_client;

```

```
--  
-- Temporary view structure for view `doctor_with_max_revenue`  
--
```

```
DROP TABLE IF EXISTS `doctor_with_max_revenue`;  
/*!50001 DROP VIEW IF EXISTS `doctor_with_max_revenue`*/;  
SET @saved_cs_client = @@character_set_client;  
SET character_set_client = utf8mb4;  
/*!50001 CREATE VIEW `doctor_with_max_revenue` AS SELECT  
  1 AS `Doctor_Name`,  
  1 AS `Revenue`*/;  
SET character_set_client = @saved_cs_client;
```

```
--  
-- Table structure for table `hospital_ward`  
--
```

```
DROP TABLE IF EXISTS `hospital_ward`;  
/*!40101 SET @saved_cs_client = @@character_set_client */;  
SET character_set_client = utf8mb4 ;  
CREATE TABLE `hospital_ward` (  
  `Ward_Number` varchar(10) NOT NULL,  
  `Ward_Name` varchar(25) NOT NULL,  
  `Floor_Number` varchar(1) NOT NULL,  
  PRIMARY KEY (`Ward_Number`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8;  
/*!40101 SET character_set_client = @saved_cs_client */;
```



```

--

-- Dumping data for table `hospital_ward`

--

LOCK TABLES `hospital_ward` WRITE;

/*!40000 ALTER TABLE `hospital_ward` DISABLE KEYS */;

INSERT INTO `hospital_ward` VALUES ('WA01','Accident Ward','1'),('WA02','Maternity
Ward','2'),('WA03','General Ward','2'),('WA04','Psychiatric Ward','3'),('WA05','Emergency
Ward','4'),('WA06','ICU Ward','3'),('WA07','Cardiology Ward','4');

/*!40000 ALTER TABLE `hospital_ward` ENABLE KEYS */;

UNLOCK TABLES;

--

-- Table structure for table `in_patient`

--

DROP TABLE IF EXISTS `in_patient`;

/*!40101 SET @saved_cs_client = @@character_set_client */;

SET character_set_client = utf8mb4 ;

CREATE TABLE `in_patient` (
  `Admission_ID` varchar(10) NOT NULL,
  `Patient_ID` varchar(10) NOT NULL,
  `Ward_Number` varchar(10) NOT NULL,
  `Nurse_ID` varchar(10) NOT NULL,
  `Admitted_Date_Time` datetime NOT NULL,
  `Room_No` varchar(20) NOT NULL,
  PRIMARY KEY (`Admission_ID`),
  KEY `Patient_ID` (`Patient_ID`),
  KEY `Ward_Number` (`Ward_Number`),

```

```
KEY `Nurse_ID` (`Nurse_ID`),
CONSTRAINT `in_patient_ibfk_1` FOREIGN KEY (`Patient_ID`) REFERENCES `patient` (`patient_id`),
CONSTRAINT `in_patient_ibfk_2` FOREIGN KEY (`Ward_Number`) REFERENCES `hospital_ward`
(`ward_number`),
CONSTRAINT `in_patient_ibfk_3` FOREIGN KEY (`Nurse_ID`) REFERENCES `nurse` (`nurse_id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
/*!40101 SET character_set_client = @saved_cs_client */;
```

```
--
```

```
-- Dumping data for table `in_patient`
```

```
--
```

```
LOCK TABLES `in_patient` WRITE;
```

```
/*!40000 ALTER TABLE `in_patient` DISABLE KEYS */;
```

```
INSERT INTO `in_patient` VALUES ('IP001','PA03','WA01','NU09','2017-01-01
09:26:17','221'),('IP002','PA08','WA02','NU08','2018-02-12
01:15:15','311'),('IP003','PA06','WA04','NU07','2017-02-05
02:45:35','220'),('IP004','PA01','WA02','NU01','2018-03-11
09:25:35','301'),('IP005','PA10','WA04','NU06','2016-04-05
20:15:25','201'),('IP006','PA07','WA03','NU02','2016-04-05 20:15:25','202');
```

```
/*!40000 ALTER TABLE `in_patient` ENABLE KEYS */;
```

```
UNLOCK TABLES;
```

```
--
```

```
-- Temporary view structure for view `inpatientdetails`
```

```
--
```

```
DROP TABLE IF EXISTS `inpatientdetails`;
```

```
/*!50001 DROP VIEW IF EXISTS `inpatientdetails`*/;
```

```
SET @saved_cs_client = @@character_set_client;
```

```
SET character_set_client = utf8mb4;
```

```

/*!50001 CREATE VIEW `inpatientdetails` AS SELECT
1 AS `Patient ID`,
1 AS `First Name`,
1 AS `Last Name`,
1 AS `Ward Name`,
1 AS `Ward Number`,
1 AS `Nurse First Name`,
1 AS `Nurse Last Name`,
1 AS `Floor Number`*/;

SET character_set_client = @saved_cs_client;

--
-- Table structure for table `nurse`
--

DROP TABLE IF EXISTS `nurse`;

/*!40101 SET @saved_cs_client = @@character_set_client */;

SET character_set_client = utf8mb4 ;

CREATE TABLE `nurse` (
  `Nurse_ID` varchar(10) NOT NULL,
  `First_Name` varchar(25) NOT NULL,
  `Last_Name` varchar(25) NOT NULL,
  `Gender` varchar(1) NOT NULL,
  `Address` varchar(25) NOT NULL,
  `Ward_Number` varchar(10) NOT NULL,
  `Nurse_Type` varchar(20) DEFAULT NULL,
  PRIMARY KEY (`Nurse_ID`),
  KEY `Ward_Number` (`Ward_Number`),

```

```

    CONSTRAINT `nurse_ibfk_1` FOREIGN KEY (`Ward_Number`) REFERENCES `hospital_ward`
(`ward_number`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

/*!40101 SET character_set_client = @saved_cs_client */;

--

-- Dumping data for table `nurse`

--

LOCK TABLES `nurse` WRITE;

/*!40000 ALTER TABLE `nurse` DISABLE KEYS */;

INSERT INTO `nurse` VALUES
('NU01','Thomas','Smith','M','Kansas','WA01','Head'),('NU02','Emma','Taylor','F','Idaho','WA01','General'
),('NU03','Liam','Johnson','M','Louisiana','WA02','Head'),('NU04','Olivia','Jones','F','Colorado','WA03','He
ad'),('NU05','Jacob','Brown','M','Vegas','WA04','Head'),('NU06','Ava','Miller','F','Kansas','WA02','General'
),('NU07','Ethan','Moore','M','Houston','WA05','General'),('NU08','Isabella','Thomas','F','Kansas','WA04','
General'),('NU09','Williams','Taylor','M','Indiana','WA06','General'),('NU10','Alexander','Hopps','M','Mich
igan','WA07','General');

/*!40000 ALTER TABLE `nurse` ENABLE KEYS */;

UNLOCK TABLES;

--

-- Temporary view structure for view `outpatient`

--

DROP TABLE IF EXISTS `outpatient`;

/*!50001 DROP VIEW IF EXISTS `outpatient`*/;

SET @saved_cs_client = @@character_set_client;

SET character_set_client = utf8mb4;

/*!50001 CREATE VIEW `outpatient` AS SELECT

1 AS `OutPatient_List`*/;

```

```

SET character_set_client = @saved_cs_client;

--

-- Table structure for table `patient`
--

DROP TABLE IF EXISTS `patient`;
/*!40101 SET @saved_cs_client = @@character_set_client */;
SET character_set_client = utf8mb4 ;
CREATE TABLE `patient` (
  `Patient_ID` varchar(8) NOT NULL,
  `First_Name` varchar(20) NOT NULL,
  `Last_Name` varchar(20) NOT NULL,
  `Gender` varchar(1) NOT NULL,
  `Date_Of_Birth` date NOT NULL,
  `Address` varchar(20) NOT NULL,
  `Contact_No` varchar(24) NOT NULL,
  PRIMARY KEY (`Patient_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
/*!40101 SET character_set_client = @saved_cs_client */;

--

-- Dumping data for table `patient`
--

LOCK TABLES `patient` WRITE;
/*!40000 ALTER TABLE `patient` DISABLE KEYS */;
INSERT INTO `patient` VALUES ('PA01','EDWARDS','RIVERA','M','1995-07-12','Arizona','2515469442'),('PA02','MITCHELL','Jolie','F','1980-09-
```

```
28','Tempe','1255464478'),('PA03','GOMEZ','Johansson','F','1972-10-18','Michigan','9495694371'),('PA04','Anne','ROBINSON','F','1976-09-28','Indiana','2269062721'),('PA05','ALLEN','Depp','M','1990-09-18','Idaho','6719251352'),('PA06','MURPHY','Homes','M','1994-05-15','Louisiana','6304468851'),('PA07','Kevin','SCOTT','M','1984-05-16','Vegas','2376449244'),('PA08','ROBERTS','Washington','M','1984-02-07','IL','1597794578'),('PA09','Natalie','TURNER','F','1989-03-25','Colorado','4077327516'),('PA10','Tom','BAKER','M','1986-04-21','Houston','2879366451');
```

```
/*!40000 ALTER TABLE `patient` ENABLE KEYS */;
```

```
UNLOCK TABLES;
```

```
--
```

```
-- Temporary view structure for view `patient_diagnosis`
```

```
--
```

```
DROP TABLE IF EXISTS `patient_diagnosis`;
```

```
/*!50001 DROP VIEW IF EXISTS `patient_diagnosis`*/;
```

```
SET @saved_cs_client = @@character_set_client;
```

```
SET character_set_client = utf8mb4;
```

```
/*!50001 CREATE VIEW `patient_diagnosis` AS SELECT
```

```
1 AS `Patient Name`,
```

```
1 AS `Diagnosis_Status`,
```

```
1 AS `Follow Ups`*/;
```

```
SET character_set_client = @saved_cs_client;
```

```
--
```

```
-- Temporary view structure for view `patient_with_fever`
```

```
--
```

```
DROP TABLE IF EXISTS `patient_with_fever`;
```

```
/*!50001 DROP VIEW IF EXISTS `patient_with_fever`*/;
```

```

SET @saved_cs_client  = @@character_set_client;
SET character_set_client = utf8mb4;

/*!50001 CREATE VIEW `patient_with_fever` AS SELECT
  1 AS `First_Name`,
  1 AS `Last_Name`*/;
SET character_set_client = @saved_cs_client;

--
-- Table structure for table `payment`
--

DROP TABLE IF EXISTS `payment`;

/*!40101 SET @saved_cs_client  = @@character_set_client */;
SET character_set_client = utf8mb4 ;
CREATE TABLE `payment` (
  `Payment_ID` varchar(10) NOT NULL,
  `Appointment_ID` varchar(10) NOT NULL,
  `Payment_Mode` varchar(25) NOT NULL,
  `Transaction_DateTime` datetime NOT NULL,
  `Transaction_Status` varchar(25) NOT NULL,
  `Transaction_Location` varchar(25) NOT NULL,
  `Total_Cost` int(11) NOT NULL,
  PRIMARY KEY (`Payment_ID`),
  KEY `Appointment_ID` (`Appointment_ID`),
  CONSTRAINT `payment_ibfk_1` FOREIGN KEY (`Appointment_ID`) REFERENCES
`schedule_appointment` (`appointment_id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;

/*!40101 SET character_set_client = @saved_cs_client */;

```

```

--

-- Dumping data for table `payment`

--

LOCK TABLES `payment` WRITE;

/*!40000 ALTER TABLE `payment` DISABLE KEYS */;

INSERT INTO `payment` VALUES ('TR001','A001','Cash','2018-01-01
05:13:00','PAID','Boston',1000),('TR002','A002','Check','2018-01-05
14:13:00','PAID','Ohio',78000),('TR003','A003','Debit Card','2017-01-14 09:00:00','NOT
PAID','Houston',8000),('TR004','A004','Check','2018-01-01 13:21:00','NOT
PAID','IL',20500),('TR005','A005','Credit Card','2018-11-01 09:12:00','NOT
PAID','Chicago',200),('TR006','A006','Check','2018-01-09 07:10:00','NOT
PAID','India',450),('TR007','A007','Debit Card','2017-01-12
18:02:00','PAID','Detroit',2000),('TR008','A008','Cash','2017-01-11
11:11:00','PAID','Colorado',3000),('TR009','A009','Credit Card','2018-01-12
14:00:00','PAID','NY',5000),('TR010','A010','Cash','2018-01-14 11:23:59','NOT
PAID','Vegas',28000),('TR011','A001','Check','2018-01-16 09:28:38','PAID','LA',1000);

/*!40000 ALTER TABLE `payment` ENABLE KEYS */;

UNLOCK TABLES;

--

-- Table structure for table `research_lab`

--

DROP TABLE IF EXISTS `research_lab`;

/*!40101 SET @saved_cs_client = @@character_set_client */;

SET character_set_client = utf8mb4 ;

CREATE TABLE `research_lab` (
  `Research_ID` varchar(8) NOT NULL,
  `Doctor_ID` varchar(8) NOT NULL,
  `Research_Type` varchar(20) NOT NULL,
  PRIMARY KEY (`Research_ID`),

```



```

KEY `Doctor_ID` (`Doctor_ID`),
CONSTRAINT `research_lab_ibfk_1` FOREIGN KEY (`Doctor_ID`) REFERENCES `doctor` (`doctor_id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;

/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `research_lab`
--

LOCK TABLES `research_lab` WRITE;

/*!40000 ALTER TABLE `research_lab` DISABLE KEYS */;

INSERT INTO `research_lab` VALUES
('RL01','DO01','Cancer'),('RL02','DO03','Cardiology'),('RL03','DO04','Micro Biology'),('RL04','DO09','Nano
Technology'),('RL05','DO05','Molecular Biology');

/*!40000 ALTER TABLE `research_lab` ENABLE KEYS */;

UNLOCK TABLES;

--
-- Table structure for table `schedule_appointment`
--

DROP TABLE IF EXISTS `schedule_appointment`;

/*!40101 SET @saved_cs_client = @@character_set_client */;

SET character_set_client = utf8mb4 ;

CREATE TABLE `schedule_appointment` (
  `Appointment_ID` varchar(10) NOT NULL,
  `Patient_ID` varchar(10) NOT NULL,
  `Doctor_ID` varchar(10) NOT NULL,
  `Appointment_Date_Time` datetime NOT NULL,

```

```

PRIMARY KEY (`Appointment_ID`),
KEY `Doctor_ID` (`Doctor_ID`),
KEY `Patient_ID` (`Patient_ID`),
CONSTRAINT `schedule_appointment_ibfk_1` FOREIGN KEY (`Doctor_ID`) REFERENCES `doctor`
(`doctor_id`),
CONSTRAINT `schedule_appointment_ibfk_2` FOREIGN KEY (`Patient_ID`) REFERENCES `patient`
(`patient_id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;

/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `schedule_appointment`
--

LOCK TABLES `schedule_appointment` WRITE;

/*!40000 ALTER TABLE `schedule_appointment` DISABLE KEYS */;

INSERT INTO `schedule_appointment` VALUES ('A001','PA01','DO10','2018-12-10
08:30:00'),('A002','PA02','DO09','2018-12-09 10:30:00'),('A003','PA03','DO05','2018-12-11
11:30:00'),('A004','PA04','DO05','2018-12-12 12:30:00'),('A005','PA05','DO05','2018-12-13
12:30:00'),('A006','PA06','DO07','2018-12-14 12:00:00'),('A007','PA07','DO06','2018-11-07
13:00:00'),('A008','PA08','DO08','2018-11-06 14:00:00'),('A009','PA09','DO02','2018-11-14
15:00:00'),('A010','PA10','DO02','2018-11-16 16:00:00');

/*!40000 ALTER TABLE `schedule_appointment` ENABLE KEYS */;

UNLOCK TABLES;

--
-- Dumping routines for database 'hospital'
--

/*!50003 DROP FUNCTION IF EXISTS `ward_floor` */;

/*!50003 SET @saved_cs_client = @@character_set_client */;

/*!50003 SET @saved_cs_results = @@character_set_results */;

```

```

/*!50003 SET @saved_col_connection = @@collation_connection */;

/*!50003 SET character_set_client = utf8mb4 */;

/*!50003 SET character_set_results = utf8mb4 */;

/*!50003 SET collation_connection = utf8mb4_0900_ai_ci */;

/*!50003 SET @saved_sql_mode      = @@sql_mode */;

/*!50003 SET sql_mode            = 'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */;

DELIMITER ;;

CREATE DEFINER='root'@'localhost' FUNCTION `ward_floor`(p_ward_num varchar(10) ) RETURNS
varchar(1) CHARSET utf8mb4

    READS SQL DATA

BEGIN

    DECLARE v_floor_number VARCHAR(1);

    DECLARE EXIT HANDLER FOR NOT FOUND RETURN NULL;


    SELECT Floor_Number INTO v_floor_number

    FROM Hospital_Ward

    where Ward_Number=p_ward_num;


    RETURN v_floor_number;

END ;;

DELIMITER ;

/*!50003 SET sql_mode            = @saved_sql_mode */;

/*!50003 SET character_set_client = @saved_cs_client */;

/*!50003 SET character_set_results = @saved_cs_results */;

/*!50003 SET collation_connection = @saved_col_connection */;

/*!50003 DROP PROCEDURE IF EXISTS `create_user` */;

/*!50003 SET @saved_cs_client     = @@character_set_client */;

/*!50003 SET @saved_cs_results   = @@character_set_results */;

```

```

/*!50003 SET @saved_col_connection = @@collation_connection */;

/*!50003 SET character_set_client = utf8mb4 */;

/*!50003 SET character_set_results = utf8mb4 */;

/*!50003 SET collation_connection = utf8mb4_0900_ai_ci */;

/*!50003 SET @saved_sql_mode      = @@sql_mode */;

/*!50003 SET sql_mode            = 'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */;

DELIMITER ;;

CREATE DEFINER=`root`@`localhost` PROCEDURE `create_user`(IN user_nm CHAR(20), IN user_ps
CHAR(20))

BEGIN

    SET @host_name := 'localhost';

    SET @user_name := user_nm;

    SET @pass := user_ps;


    SET @db_nm:='hospital';


    SET @sql := CONCAT("CREATE USER ", QUOTE(@user_name), "@", QUOTE(@host_name), " IDENTIFIED
    BY ", QUOTE(@pass));

    PREPARE stmt FROM @sql;

    EXECUTE stmt;

    SET @GRANT_PERMISSIONS = CONCAT("GRANT ALL ON ", @db_nm, ". * TO ", QUOTE(@user_name),
    "@", QUOTE(@host_name));

    PREPARE statement FROM @GRANT_PERMISSIONS;

    EXECUTE statement;


END ;;

DELIMITER ;

/*!50003 SET sql_mode            = @saved_sql_mode */;

/*!50003 SET character_set_client = @saved_cs_client */;

/*!50003 SET character_set_results = @saved_cs_results */;

```

```

/*!50003 SET collation_connection = @saved_col_connection */;

/*!50003 DROP PROCEDURE IF EXISTS `Max_Payment_Made_By_Patient` */;

/*!50003 SET @saved_cs_client = @@character_set_client */;

/*!50003 SET @saved_cs_results = @@character_set_results */;

/*!50003 SET @saved_col_connection = @@collation_connection */;

/*!50003 SET character_set_client = utf8mb4 */;

/*!50003 SET character_set_results = utf8mb4 */;

/*!50003 SET collation_connection = utf8mb4_0900_ai_ci */;

/*!50003 SET @saved_sql_mode = @@sql_mode */;

/*!50003 SET sql_mode = 'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */;

DELIMITER ;;

CREATE DEFINER=`root`@`localhost` PROCEDURE `Max_Payment_Made_By_Patient`(IN first_name
varchar(25) )

BEGIN

SELECT t.Total_Cost, p.First_Name AS Max_Payment_Made_By_Patient from Payment t
join Schedule_Appointment a on t.Appointment_ID=a.Appointment_ID
JOIN Patient p on p.Patient_ID=a.Patient_ID
where p.First_Name=first_name;

END ;;

DELIMITER ;

/*!50003 SET sql_mode = @saved_sql_mode */;

/*!50003 SET character_set_client = @saved_cs_client */;

/*!50003 SET character_set_results = @saved_cs_results */;

/*!50003 SET collation_connection = @saved_col_connection */;

/*!50003 DROP PROCEDURE IF EXISTS `no_of_appointments` */;

/*!50003 SET @saved_cs_client = @@character_set_client */;

/*!50003 SET @saved_cs_results = @@character_set_results */;

/*!50003 SET @saved_col_connection = @@collation_connection */;

```

```

/*!50003 SET character_set_client = utf8mb4 */ ;

/*!50003 SET character_set_results = utf8mb4 */ ;

/*!50003 SET collation_connection = utf8mb4_0900_ai_ci */ ;

/*!50003 SET @saved_sql_mode      = @@sql_mode */ ;

/*!50003 SET sql_mode            = 'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */ ;

DELIMITER ;;

CREATE DEFINER=`root`@`localhost` PROCEDURE `no_of_appointments`(IN fn VARCHAR(20),in ln
VARCHAR(20))

BEGIN

SELECT count(*) AS Appointment_Count,CONCAT(p.First_name,' ',p.Last_Name) AS Patient_Name from
Schedule_Appointment a

JOIN Patient p  ON a.Patient_ID=p.Patient_ID

WHERE p.First_Name=fn AND p.Last_Name=ln

GROUP BY a.Patient_ID;

END ;;

DELIMITER ;

/*!50003 SET sql_mode            = @saved_sql_mode */ ;

/*!50003 SET character_set_client = @saved_cs_client */ ;

/*!50003 SET character_set_results = @saved_cs_results */ ;

/*!50003 SET collation_connection = @saved_col_connection */ ;

/*!50003 DROP PROCEDURE IF EXISTS `nurses_Per_ward` */;

/*!50003 SET @saved_cs_client      = @@character_set_client */ ;

/*!50003 SET @saved_cs_results     = @@character_set_results */ ;

/*!50003 SET @saved_col_connection = @@collation_connection */ ;

/*!50003 SET character_set_client = utf8mb4 */ ;

/*!50003 SET character_set_results = utf8mb4 */ ;

/*!50003 SET collation_connection = utf8mb4_0900_ai_ci */ ;

/*!50003 SET @saved_sql_mode      = @@sql_mode */ ;

/*!50003 SET sql_mode            = 'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */ ;

```

```

DELIMITER ;;

CREATE DEFINER=`root`@`localhost` PROCEDURE `nurses_Per_ward`(IN ward_num VARCHAR(10) )

BEGIN

SELECT h.Ward_Name,COUNT(*) AS Nurse_Count

FROM Nurse n

JOIN Hospital_Ward h ON n.Ward_Number=h.Ward_Number

where h.Ward_number=ward_num;

END ;;

DELIMITER ;

/*!50003 SET sql_mode          = @saved_sql_mode */ ;

/*!50003 SET character_set_client = @saved_cs_client */ ;

/*!50003 SET character_set_results = @saved_cs_results */ ;

/*!50003 SET collation_connection = @saved_col_connection */ ;

/*!50003 DROP PROCEDURE IF EXISTS `patient_bill` */;

/*!50003 SET @saved_cs_client      = @@character_set_client */ ;

/*!50003 SET @saved_cs_results    = @@character_set_results */ ;

/*!50003 SET @saved_col_connection = @@collation_connection */ ;

/*!50003 SET character_set_client = utf8mb4 */ ;

/*!50003 SET character_set_results = utf8mb4 */ ;

/*!50003 SET collation_connection = utf8mb4_0900_ai_ci */ ;

/*!50003 SET @saved_sql_mode      = @@sql_mode */ ;

/*!50003 SET sql_mode            = 'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */ ;

DELIMITER ;;

CREATE DEFINER=`root`@`localhost` PROCEDURE `patient_bill`(in tran_status varchar(25))

BEGIN

select CONCAT(p.First_name,',',p.Last_Name) AS Patient_Name from Patient p

join schedule_appointment a on a.Patient_ID=p.Patient_ID

join Payment t on t.Appointment_ID=a.Appointment_ID

where Transaction_Status=tran_status;

```

```

END ;;

DELIMITER ;

/*!50003 SET sql_mode          = @saved_sql_mode */;

/*!50003 SET character_set_client = @saved_cs_client */;

/*!50003 SET character_set_results = @saved_cs_results */;

/*!50003 SET collation_connection = @saved_col_connection */;

/*!50003 DROP PROCEDURE IF EXISTS `Patient_Gender_Count` */;

/*!50003 SET @saved_cs_client      = @@character_set_client */;

/*!50003 SET @saved_cs_results    = @@character_set_results */;

/*!50003 SET @saved_col_connection = @@collation_connection */;

/*!50003 SET character_set_client = utf8mb4 */;

/*!50003 SET character_set_results = utf8mb4 */;

/*!50003 SET collation_connection = utf8mb4_0900_ai_ci */;

/*!50003 SET @saved_sql_mode      = @@sql_mode */;

/*!50003 SET sql_mode            = 'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */;

DELIMITER ;;

CREATE DEFINER=`root`@`localhost` PROCEDURE `Patient_Gender_Count`(IN TOTAL varchar(10))

BEGIN

SELECT COUNT(Admission_ID) AS Patient_COUNT

FROM IN_Patient

WHERE Patient_ID IN(

        SELECT Patient_ID FROM Patient

        WHERE Gender=TOTAL

);

END ;;

DELIMITER ;

/*!50003 SET sql_mode          = @saved_sql_mode */;

/*!50003 SET character_set_client = @saved_cs_client */;

/*!50003 SET character_set_results = @saved_cs_results */;

```



```

/*!50003 SET collation_connection = @saved_col_connection */;

--

-- Final view structure for view `amount_paid_by_patient`

--

/*!50001 DROP VIEW IF EXISTS `amount_paid_by_patient`*/;

/*!50001 SET @saved_cs_client      = @@character_set_client */;
/*!50001 SET @saved_cs_results    = @@character_set_results */;
/*!50001 SET @saved_col_connection = @@collation_connection */;
/*!50001 SET character_set_client  = utf8mb4 */;
/*!50001 SET character_set_results = utf8mb4 */;
/*!50001 SET collation_connection  = utf8mb4_0900_ai_ci */;
/*!50001 CREATE ALGORITHM=UNDEFINED */
/*!50013 DEFINER=`root`@`localhost` SQL SECURITY DEFINER */
/*!50001 VIEW `amount_paid_by_patient` AS select sum(`p`.`Total_Cost`) AS
`total_amount`,`a`.`Patient_ID` AS `Patient_ID` from (`payment` `p` join `schedule_appointment` `a`
where ((`a`.`Appointment_ID` = `p`.`Appointment_ID`) and `a`.`Patient_ID` in (select
`patient`.`Patient_ID` from `patient`))) group by `a`.`Patient_ID` */;
/*!50001 SET character_set_client  = @saved_cs_client */;
/*!50001 SET character_set_results = @saved_cs_results */;
/*!50001 SET collation_connection  = @saved_col_connection */;

--

-- Final view structure for view `appointment_reschedule`

--

/*!50001 DROP VIEW IF EXISTS `appointment_reschedule`*/;
/*!50001 SET @saved_cs_client      = @@character_set_client */;
/*!50001 SET @saved_cs_results    = @@character_set_results */;

```

```

/*!50001 SET @saved_col_connection = @@collation_connection */;

/*!50001 SET character_set_client = utf8mb4 */;

/*!50001 SET character_set_results = utf8mb4 */;

/*!50001 SET collation_connection = utf8mb4_0900_ai_ci */;

/*!50001 CREATE ALGORITHM=UNDEFINED */

/*!50013 DEFINER=`root`@`localhost` SQL SECURITY DEFINER */

/*!50001 VIEW `appointment_reschedule` AS select
(`schedule_appointment`.`Appointment_Date_Time` + interval 3 day) AS
`DATE_ADD(Appointment_Date_Time,INTERVAL 3 DAY)` from `schedule_appointment` where
(`schedule_appointment`.`Doctor_ID` = (select `doctor`.`Doctor_ID` from `doctor` where
((`doctor`.`First_Name` = 'David') and (`doctor`.`Last_Name` = 'Collins')))) */;

/*!50001 SET character_set_client = @saved_cs_client */;

/*!50001 SET character_set_results = @saved_cs_results */;

/*!50001 SET collation_connection = @saved_col_connection */;

--

-- Final view structure for view `doctor_not_in_research`

--

/*!50001 DROP VIEW IF EXISTS `doctor_not_in_research` */;

/*!50001 SET @saved_cs_client = @@character_set_client */;

/*!50001 SET @saved_cs_results = @@character_set_results */;

/*!50001 SET @saved_col_connection = @@collation_connection */;

/*!50001 SET character_set_client = utf8mb4 */;

/*!50001 SET character_set_results = utf8mb4 */;

/*!50001 SET collation_connection = utf8mb4_0900_ai_ci */;

/*!50001 CREATE ALGORITHM=UNDEFINED */

/*!50013 DEFINER=`root`@`localhost` SQL SECURITY DEFINER */

/*!50001 VIEW `doctor_not_in_research` AS select concat(`doctor`.`First_Name`,`doctor`.`Last_Name`)
AS `Doctor_Name` from `doctor` where (not(`doctor`.`Doctor_ID` in (select `research_lab`.`Doctor_ID`
from `research_lab`))) */;

```

```

/*!50001 SET character_set_client    = @saved_cs_client */;
/*!50001 SET character_set_results   = @saved_cs_results */;
/*!50001 SET collation_connection    = @saved_col_connection */;

--

-- Final view structure for view `doctor_with_max_revenue`
--

/*!50001 DROP VIEW IF EXISTS `doctor_with_max_revenue`*/;
/*!50001 SET @saved_cs_client        = @@character_set_client */;
/*!50001 SET @saved_cs_results       = @@character_set_results */;
/*!50001 SET @saved_col_connection   = @@collation_connection */;
/*!50001 SET character_set_client     = utf8mb4 */;
/*!50001 SET character_set_results    = utf8mb4 */;
/*!50001 SET collation_connection     = utf8mb4_0900_ai_ci */;
/*!50001 CREATE ALGORITHM=UNDEFINED */
/*!50013 DEFINER=`root`@`localhost` SQL SECURITY DEFINER */
/*!50001 VIEW `doctor_with_max_revenue` AS select concat(`d`.`First_Name`,`d`.`Last_Name`) AS
`Doctor_Name`,sum(`p`.`Total_Cost`) AS `Revenue` from ((`payment` `p` join `schedule_appointment`
`a` on((`a`.`Appointment_ID` = `p`.`Appointment_ID`))) join `doctor` `d` on((`d`.`Doctor_ID` =
`a`.`Doctor_ID`))) group by `d`.`First_Name` order by `p`.`Total_Cost` */;
/*!50001 SET character_set_client    = @saved_cs_client */;
/*!50001 SET character_set_results   = @saved_cs_results */;
/*!50001 SET collation_connection    = @saved_col_connection */;

--

-- Final view structure for view `inpatientdetails`
--

/*!50001 DROP VIEW IF EXISTS `inpatientdetails`*/;

```

```

/*!50001 SET @saved_cs_client      = @@character_set_client */;
/*!50001 SET @saved_cs_results    = @@character_set_results */;
/*!50001 SET @saved_col_connection = @@collation_connection */;
/*!50001 SET character_set_client  = utf8mb4 */;
/*!50001 SET character_set_results = utf8mb4 */;
/*!50001 SET collation_connection  = utf8mb4_0900_ai_ci */;
/*!50001 CREATE ALGORITHM=UNDEFINED */
/*!50013 DEFINER=`root`@`localhost` SQL SECURITY DEFINER */
/*!50001 VIEW `inpatientdetails` AS select `i`.`Patient_ID` AS `Patient ID`,`p`.`First_Name` AS `First Name`,`p`.`Last_Name` AS `Last Name`,`w`.`Ward_Name` AS `Ward Name`,`w`.`Ward_Number` AS `Ward Number`,`n`.`First_Name` AS `Nurse First Name`,`n`.`Last_Name` AS `Nurse Last Name`,`w`.`Floor_Number` AS `Floor Number` from (((`in_patient` `i` join `patient` `p` on(((`i`.`Patient_ID` = `p`.`Patient_ID`)))) join `hospital_ward` `w` on(((`i`.`Ward_Number` = `w`.`Ward_Number`)))) join `nurse` `n` on(((`i`.`Nurse_ID` = `n`.`Nurse_ID`)))) */;
/*!50001 SET character_set_client  = @saved_cs_client */;
/*!50001 SET character_set_results = @saved_cs_results */;
/*!50001 SET collation_connection  = @saved_col_connection */;

--
-- Final view structure for view `outpatient`
--

/*!50001 DROP VIEW IF EXISTS `outpatient` */;
/*!50001 SET @saved_cs_client      = @@character_set_client */;
/*!50001 SET @saved_cs_results    = @@character_set_results */;
/*!50001 SET @saved_col_connection = @@collation_connection */;
/*!50001 SET character_set_client  = utf8mb4 */;
/*!50001 SET character_set_results = utf8mb4 */;
/*!50001 SET collation_connection  = utf8mb4_0900_ai_ci */;
/*!50001 CREATE ALGORITHM=UNDEFINED */

```

```

/*!50013 DEFINER='root'@'localhost' SQL SECURITY DEFINER */

/*!50001 VIEW `outpatient` AS select concat(`p`.`First_Name`,`p`.`Last_Name`) AS `OutPatient_List`
from `patient` `p` where (not(`p`.`Patient_ID` in (select `in_patient`.`Patient_ID` from `in_patient`))) */;

/*!50001 SET character_set_client    = @saved_cs_client */;
/*!50001 SET character_set_results   = @saved_cs_results */;
/*!50001 SET collation_connection    = @saved_col_connection */;

--

-- Final view structure for view `patient_diagnosis`
--

/*!50001 DROP VIEW IF EXISTS `patient_diagnosis`*/;

/*!50001 SET @saved_cs_client      = @@character_set_client */;
/*!50001 SET @saved_cs_results    = @@character_set_results */;
/*!50001 SET @saved_col_connection = @@collation_connection */;
/*!50001 SET character_set_client  = utf8mb4 */;
/*!50001 SET character_set_results = utf8mb4 */;
/*!50001 SET collation_connection  = utf8mb4_0900_ai_ci */;
/*!50001 CREATE ALGORITHM=UNDEFINED */

/*!50013 DEFINER='root'@'localhost' SQL SECURITY DEFINER */

/*!50001 VIEW `patient_diagnosis` AS select concat(`p`.`First_Name`,`p`.`Last_Name`) AS `Patient
Name`,`d`.`Diagnosis_Status` AS `Diagnosis_Status`,`d`.`Follow_Up_Methods` AS `Follow Ups` from
(`patient` `p` join `diagnosis` `d` on((`d`.`Patient_ID` = `p`.`Patient_ID`))) */;

/*!50001 SET character_set_client    = @saved_cs_client */;
/*!50001 SET character_set_results   = @saved_cs_results */;
/*!50001 SET collation_connection    = @saved_col_connection */;

--

-- Final view structure for view `patient_with_fever`
--

```

```

/*!50001 DROP VIEW IF EXISTS `patient_with_fever`*/;

/*!50001 SET @saved_cs_client      = @@character_set_client */;

/*!50001 SET @saved_cs_results    = @@character_set_results */;

/*!50001 SET @saved_col_connection = @@collation_connection */;

/*!50001 SET character_set_client  = utf8mb4 */;

/*!50001 SET character_set_results = utf8mb4 */;

/*!50001 SET collation_connection  = utf8mb4_0900_ai_ci */;

/*!50001 CREATE ALGORITHM=UNDEFINED */

/*!50013 DEFINER=`root`@`localhost` SQL SECURITY DEFINER */

/*!50001 VIEW `patient_with_fever` AS select `patient`.`First_Name` AS
`First_Name`,`patient`.`Last_Name` AS `Last_Name` from `patient` where `patient`.`Patient_ID` in (select
`scheduled_appointment`.`Patient_ID` from `scheduled_appointment` where
`scheduled_appointment`.`Appointment_ID` in (select `diagnosis`.`Appointment_ID` from `diagnosis`
where (`diagnosis`.`Diagnosis_Status` = 'Fever')))) order by `patient`.`Patient_ID` */;

/*!50001 SET character_set_client  = @saved_cs_client */;

/*!50001 SET character_set_results = @saved_cs_results */;

/*!50001 SET collation_connection  = @saved_col_connection */;

/*!40103 SET TIME_ZONE=@OLD_TIME_ZONE */;

/*!40101 SET SQL_MODE=@OLD_SQL_MODE */;

/*!40014 SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS */;

/*!40014 SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS */;

/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;

/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;

/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;

/*!40111 SET SQL_NOTES=@OLD_SQL_NOTES */;

```

```
-- Dump completed on 2018-12-13 15:35:39
```