

1.0 Introduction & Problem Specification



A digital solution was suggested, reports could be submitted online via a secure website. Medical reports could be submitted electronically in a pdf file. This solution would also mean that the clerk taking the phone call could query the database by the person's identification card number and access the information in a matter of seconds.

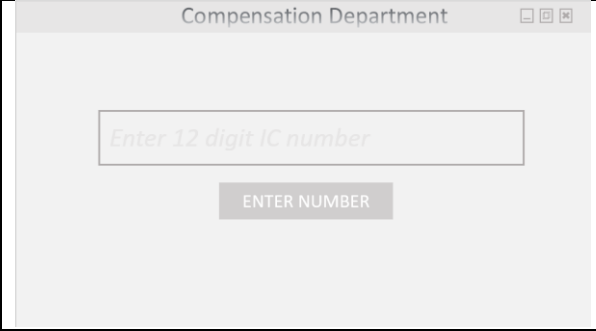
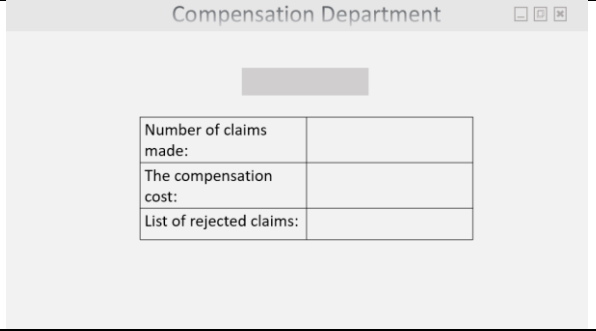
Assumption:

- Because the information can be accessed in a matter of seconds, employee who needed to check for the status of the claim does not have to wait and thus do not have to be assigned with any waiting number. They simply do not have to wait for turns.
- Because the data can simply be accessed by relating with the employee's ID, no need to store the files for the compensation claims in any other files according to the initial and severity of the injury. Because all records of injuries, claims and medical reports are stored digitally.
- All employees are associated with their 12 digit IDs and not any other ID because even if they are immigrants, they will still have a "MyKad Merah" that consists of the 12 digit identification number.
- Even though the annual report consisted of 3 reports, but the click of the "Annual Report" prompts 3 queries to report what is needed.

1.1 Design for the interface

Below is the design for the interface

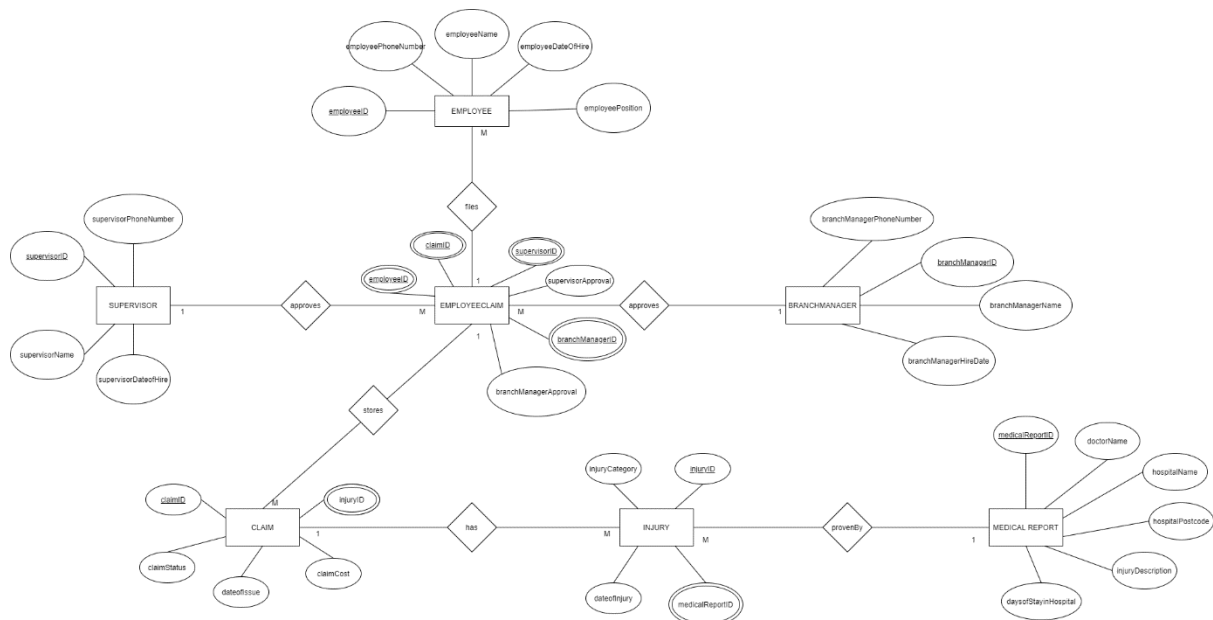
 <p>Compensation Department</p> <p>ANNUAL REPORTS</p> <p>CHECK EMPLOYEE'S CLAIM STATUS</p>	 <p>Compensation Department</p> <p>Click which year to view the annual reports:</p> <p>2021 2020</p> <p>2019 2018</p> <p>Click here to view more years</p>
First, the clerk in charge would have to choose whether to check for employee's claim status or to check for annual report	Then, if the clerk clicks "Annual Reports", they will have to choose to see which year of report.

 <p>Compensation Department</p> <p>Enter 12 digit IC number</p> <p>ENTER NUMBER</p>	 <p>Compensation Department</p> <table border="1"><tr><td>Number of claims made:</td><td></td></tr><tr><td>The compensation cost:</td><td></td></tr><tr><td>List of rejected claims:</td><td></td></tr></table>	Number of claims made:		The compensation cost:		List of rejected claims:	
Number of claims made:							
The compensation cost:							
List of rejected claims:							

Then, if the clerk clicks “check employee’s claim status”, they will be brought to a page that prompts the clerk to enter the employee’s ID.

Else, if the clerk clicks on any of the year for the annual report, this page will appear. To see this page filled with details, go to the theoretical queries.

1.2 ERD & Relational Schema



EMPLOYEE (employeeID, employeeName, employeeDateOfHire, employeePosition, employeePhoneNumber)

CLAIM (claimID, claimStatus, claimCost, injuryID, dateofIssue)

EMPLOYEECLAIM (employeeID, claimID, supervisorID, branchManagerID, supervisorApproval, branchManagerApproval)

SUPERVISOR (supervisorID, supervisorName, supervisorDateofHire, supervisorPhoneNumber)

BRANCHMANAGER(branchManagerName, branchManagerID, branchManagerPhoneNumbers, branchManagerDateofHire)

INJURY (injuryID, medicalReportID, dateofInjury, injuryCategory)

MEDICALREPORT(medicalReportID, doctorName, hospitalName, hospitalPostcode, injuryDescription, daysofStaysinHospital)

1.3 Data Dictionary

EMPLOYEE

Field Name	Data Type	Field Size	Constraint	Description
employeeID	number	12	primary key	stores employee id, automatically generated
employeeName	varchar2	255	not null	stores employee name

employeeDateOfHire	date	-	not null	stores employee hire date
employeePosition	varchar2	255	not null	stores employee hire date
employeePhoneNumber	number	11	not null	phone number of employee, automatically generated

CLAIM

Field Name	Data Type	Field Size	Constraint	Description
claimID	varchar2	10	primary key	stores the id of the claim
claimStatus	varchar2	50		stores the status of the claim
claimCost	number	5,2	not null	stores the total of the claim
injuryID	varchar2	10	foreign key	stores the id of the injury
dateofIssue	date			stores the date of the claim issuance

EMPLOYEECLAIM

Field Name	Data Type	Field Size	Constraint	Description
employeeID	varchar2	10	primary key foreign key	stores employee id, automatically generated
claimID	varchar2	10	primary key foreign key	stores the id of the claim
supervisorID	number	12	foreign key	stores the id of the supervisor that is in charge of approving this claim
branchManagerID	number	12	foreign key	stores the id of the branch manager that is in charge of approving this claim
supervisorApproval	varchar2	50		stores the status of the approval by supervisor Accepted, Rejected Pending

branchManagerApproval	varchar2	50		stores the status of the approval by branch manager Accepted, Rejected Pending
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SUPERVISOR

Field Name	Data Type	Field Size	Constraint	Description
supervisorID	number	12	primary key	stores the id of the supervisor that is in charge of approving this claim
supervisorName	varchar2	255	not null	stores the name of the supervisor
supervisorDateofHire	date			stores the date that this supervisor is hired
supervisorPhoneNumber	number	11		stores the phone number of this supervisor

BRANCHMANAGER

Field Name	Data Type	Field Size	Constraint	Description
branchManagerName	varchar2	50	not null	stores the name of the branch manager
branchManagerID	number	12	primary key	stores the id of the branch manager that is in charge of approving this claim
branchManagerPhoneNumber	number	11		stores the phone number of the branch manager
branchManagerDateofHire	date			stores the date where this manager is hired

INJURY

Field Name	Data Type	Field Size	Constraint	Description
injuryID	varchar2	10	Primary key	stores the id of the injury
medicalReportID	varchar2	10	foreign key	stores the id of the medical report
dateofInjury	date			stores the date of the injury
injuryCategory	varchar2	255		stores the category of the injury: minor or major

MEDICALREPORT

Field Name	Data Type	Field Size	Constraint	Description
medicalReportID	varchar2	10	primary key	stores the unique id of medical report, auto generated
doctorName	varchar2	255		stores the name of the doctor
hospitalName	varchar2	255		stores the name of the hospital
hospitalPostcode	number	5		stores the postcode of the hospital
injuryDescription	varchar2	255		stores the description of the injury
daysofStaysinHospital	number	4		stores the number of days of stay in hospital

1.4 SQL Code and Table Output

Source code:

****will not include queries because queries are in separate section****

```
create table employee
(
  employeeID number(12) primary key,
  employeeName varchar2(255) not null,
  employeeDateofHire date not null,
  employeePosition varchar2 (255) not null,
  employeePhoneNumber number(11) not null
);
```

```
create table claim
(
  claimID varchar2 (10) primary key,
  claimStatus varchar2(50),
```

```

claimCost number(5,2) not null,
injuryID varchar2(10),
dateofIssue date,

CONSTRAINT FKCL_injuryID FOREIGN KEY (injuryID) REFERENCES INJURY (injuryID) ON DELETE CASCADE
);

create table employeeclaim
(
employeeID number (12),
claimID varchar2(10),
supervisorID number(12),
branchManagerID number(12),
supervisorApproval varchar2(50),
branchManagerApproval varchar2(50),

primary key (employeeID, claimID),
CONSTRAINT FKEC_employeeID FOREIGN KEY (employeeID) REFERENCES EMPLOYEE (employeeID) ON DELETE CASCADE,
CONSTRAINT FKEC_claimID FOREIGN KEY (claimID) REFERENCES CLAIM (claimID) ON DELETE CASCADE,
CONSTRAINT FKEC_supervisorID FOREIGN KEY (supervisorID) REFERENCES SUPERVISOR (supervisorID) ON DELETE CASCADE,
CONSTRAINT FKEC_branchManagerID FOREIGN KEY (branchManagerID) REFERENCES BRANCHMANAGER (branchManagerID) ON DELETE CASCADE
);

create table supervisor
(
supervisorID number (12) primary key,
supervisorName varchar2 (255) not null,
supervisorDateofHired date,
supervisorPhoneNumber number (11)
);

create table branchmanager
(
branchManagerName varchar2 (50) not null,
branchManagerID number (12) primary key,
branchManagerPhoneNumber number(11),
branchManagerDateofHire date
);

create table injury
(
injuryID varchar2(10) primary key,
medicalReportID varchar2(10),
dateofinjury date,
injuryCategory varchar2 (255),
CONSTRAINT FKIQ_medicalReportID FOREIGN KEY (medicalReportID) REFERENCES MEDICALREPORT (medicalReportID) ON DELETE CASCADE
);

create table medicalreport
(
medicalReportID varchar2(10) primary key,
doctorName varchar2(255),
hospitalName varchar2 (255),
hospitalPostcode number(5),
injuryDescription varchar2(255),
number(4)
);

INSERT INTO employee VALUES(970915128821, 'Jojo Christie', '31-Jul-2019', 'Corporalki Wind Summoner', 60189923457);
INSERT INTO employee VALUES(950802014321, 'Kevin Sanjaya Sukamoljo', '31-Jul-2019', 'Corporalki Healers', 60189923457);
INSERT INTO employee VALUES(970907042311, 'Timothee Chalamet', '28-Aug-2019', 'Etherealki Squallers', 601783990);
INSERT INTO employee VALUES(900819063226, 'Nur Ariana Nur Grande binti Bungawan', '20-Jun-2018', 'Etherealki Tidemakers', 60164553221);
INSERT INTO employee VALUES(890920107218, 'Dayang Siti Maimunah binti Haji Sabri', '11-Apr-2019', 'Materialki Alkemi', 60189923457);
INSERT INTO employee VALUES(920812091120, 'Intan Sarah binti Awang Sulaiman', '03-May-2019', 'Materialki Durasts', 60189023444);

INSERT INTO claim VALUES ('CL0001', 'accepted', 300.00, 'INJ0001', '1-JAN-2021');

INSERT INTO EMPLOYEECLAIM VALUES (970915128821, 'CL0001', 910909047731, 900129036723, 'accepted', 'accepted');

INSERT INTO SUPERVISOR VALUES (910909047731, 'Ran Takahashi', '20-apr-2009', 60167219928);

INSERT INTO BRANCHMANAGER VALUES ('Lee Zii Jia', 900129036723, 60182321123, '20-Mar-2010');

INSERT INTO INJURY VALUES ('INJ0001', 'MR0000', '28-dec-2021', 'minor');

INSERT INTO MEDICALREPORT VALUES ('MR0000', '...', '...', 0, '...', 3);

INSERT INTO MEDICALREPORT VALUES ('MR0001', 'Dr Cinta Laura', 'Hospital Duchess of Kent', 88450, 'Severe sprained ankle', 3);
INSERT INTO MEDICALREPORT VALUES ('MR0002', 'Dr Carlisle Cullen', 'Phoenix Central Hospital', 49500, 'Skull breakage', 7);
INSERT INTO MEDICALREPORT VALUES ('MR0003', 'Dr Zhang Jie', 'Phoenix Central Hospital', 90705, 'Skull breakage', 7);
INSERT INTO MEDICALREPORT VALUES ('MR0004', 'Dr Allison DiLaurentis', 'Rosewood Hospital', 80605, 'Broken toe', 5);

```

```

INSERT INTO MEDICALREPORT VALUES ('MR0005', 'Dr Mona Van der Waal', 'Rosewood Hospital', 80605, 'Splinter due to excessive heat', 4);
INSERT INTO MEDICALREPORT VALUES ('MR0006', 'Dr Zhang Jie', 'Phoenix Central Hospital', 90705, 'Fatigued hand syndrome', 1);
INSERT INTO MEDICALREPORT VALUES ('MR0007', 'Dr Meredith Gray', 'Phoenix Central Hospital', 49500, 'Slipped intervertebral disc', 1);
INSERT INTO MEDICALREPORT VALUES ('MR0008', 'Dr Carlisle Cullen', 'Phoenix Central Hospital', 49500, 'Covid19', 5);
INSERT INTO MEDICALREPORT VALUES ('MR0009', 'Dr Carlisle Cullen', 'Phoenix Central Hospital', 49500, 'Covid19', 2);
INSERT INTO MEDICALREPORT VALUES ('MR0010', 'Dr Carlisle Cullen', 'Phoenix Central Hospital', 49500, 'Covid19', 1);

```

```

INSERT INTO INJURY VALUES ('INJ0001', 'MR0000', '28-dec-2021', 'minor');
INSERT INTO INJURY VALUES ('INJ0002', 'MR0001', '9-feb-2021', 'minor');
INSERT INTO INJURY VALUES ('INJ0003', 'MR0000', '9-mar-2021', 'minor');
INSERT INTO INJURY VALUES ('INJ0004', 'MR0000', '10-apr-2021', 'minor');
INSERT INTO INJURY VALUES ('INJ0005', 'MR0002', '10-may-2021', 'major');
INSERT INTO INJURY VALUES ('INJ0006', 'MR0003', '19-jun-2021', 'major');
INSERT INTO INJURY VALUES ('INJ0007', 'MR0004', '01-jul-2021', 'major');
INSERT INTO INJURY VALUES ('INJ0008', 'MR0005', '09-aug-2021', 'major');
INSERT INTO INJURY VALUES ('INJ0009', 'MR0006', '29-sep-2021', 'major');
INSERT INTO INJURY VALUES ('INJ0010', 'MR0007', '15-dec-2021', 'major');

```

```

INSERT INTO claim VALUES ('CL0002', 'accepted', 300.00, 'INJ0002', '10-FEB-2021');
INSERT INTO claim VALUES ('CL0003', 'pending', 300.00, 'INJ0003', '13-MAR-2021');
INSERT INTO claim VALUES ('CL0004', 'rejected', 0.00, 'INJ0004', '15-APR-2021');
INSERT INTO claim VALUES ('CL0005', 'rejected', 0.00, 'INJ0005', '12-MAY-2021');
INSERT INTO claim VALUES ('CL0006', 'rejected', 150.00, 'INJ0006', '22-JUNE-2021');
INSERT INTO claim VALUES ('CL0007', 'accepted', 300.00, 'INJ0007', '03-JUL-2021');
INSERT INTO claim VALUES ('CL0008', 'accepted', 400.00, 'INJ0008', '14-AUG-2021');
INSERT INTO claim VALUES ('CL0009', 'pending', 0.00, 'INJ0009', '30-SEP-2021');
INSERT INTO claim VALUES ('CL0010', 'rejected', 0.00, 'INJ0010', '20-DEC-2021');

```

```

--INSERT INTO EMPLOYEECLAIM VALUES (970915128821, 'CL0001', 910909047731, 900129036723, 'accepted', 'accepted');
INSERT INTO EMPLOYEECLAIM VALUES (970915128821, 'CL0001', 910909047731, 900129036723, 'accepted', 'accepted');
INSERT INTO EMPLOYEECLAIM VALUES (970915128821, 'CL0002', 910909047731, 900129036723, 'accepted', 'accepted');
INSERT INTO EMPLOYEECLAIM VALUES (970915128821, 'CL0003', 910909047731, 900129036723, 'accepted', 'accepted');
INSERT INTO EMPLOYEECLAIM VALUES (970915128821, 'CL0004', 910909047731, 900129036723, 'accepted', 'accepted');
INSERT INTO EMPLOYEECLAIM VALUES (970907042311, 'CL0005', 910909047731, 900129036723, 'accepted', 'accepted');
INSERT INTO EMPLOYEECLAIM VALUES (900819063226, 'CL0006', 910909047731, 900129036723, 'accepted', 'accepted');
INSERT INTO EMPLOYEECLAIM VALUES (890920107218, 'CL0007', 910909047731, 900129036723, 'accepted', 'accepted');
INSERT INTO EMPLOYEECLAIM VALUES (890920107218, 'CL0008', 910909047731, 900129036723, 'accepted', 'accepted');
INSERT INTO EMPLOYEECLAIM VALUES (950802014321, 'CL0009', 910909047731, 900129036723, 'accepted', 'accepted');
INSERT INTO EMPLOYEECLAIM VALUES (920812091120, 'CL0010', 910909047731, 900129036723, 'accepted', 'accepted');

```

```

INSERT INTO SUPERVISOR VALUES (910909047731, 'Ran Takahashi', '20-apr-2009', 60167219928);
INSERT INTO SUPERVISOR VALUES (710909049732, 'Catalina Martin', '20-dec-2005', 60195598123);

```

```

INSERT INTO BRANCHMANAGER VALUES ('Lee Zii Jia', 900129036723, 60182321123, '20-Mar-2010');
INSERT INTO BRANCHMANAGER VALUES ('Chen Dong Ping', 950707118721, 60192314456, '19-Apr-2010');

```

```

select * from employee;
select * from claim;
select * from employee claim;
select * from supervisor;
select * from brandmanager;
select * from injury;
select * from medicalreport;

```

Table output:

EMPLOYEEID	EMPLOYEENAME	EMPLOYEEDATEOFHIRE	EMPLOYEEPOSITION	EMPLOYEEPHONENUMBER
950802014321	Kevin Sanjaya Sukamoljo	31-JUL-19	Corporalki Healers	60189923457
970907042311	Timothee Chalamet	28-AUG-19	Etherealki Squallers	601783990
900819063226	Nur Ariana Nur Grande binti Bungawan	20-JUN-18	Etherealki Tidemakers	60164553221
890920107218	Dayang Siti Maimunah binti Haji Sabri	11-APR-19	Materialki Alkemi	60189923457
920812091120	Intan Sarah binti Awang Sulaiman	03-MAY-19	Materialki Durasts	60189023444
970915128821	Jojo Christie	31-JUL-19	Corporalki Wind Summoner	60189923457

CLAIMID	CLAIMSTATUS	CLAIMCOST	INJURYID	DATEOFISSUE
CL0009	pending	0	INJ0009	30-SEP-21
CL0001	accepted	300	INJ0001	01-JAN-21
CL0002	accepted	300	INJ0002	10-FEB-21
CL0003	pending	300	INJ0003	13-MAR-21
CL0004	rejected	0	INJ0004	15-APR-21
CL0005	rejected	0	INJ0005	12-MAY-21
CL0006	rejected	150	INJ0006	22-JUN-21
CL0007	accepted	300	INJ0007	03-JUL-21
CL0008	accepted	400	INJ0008	14-AUG-21
CL0010	rejected	0	INJ0010	20-DEC-21

EMPLOYEEID	CLAIMID	SUPERVISORID	BRANCHMANAGERID	SUPERVISORAPPROVAL	BRANCHMANAGERAPPROVAL
890920107218	CL0007	710909049732	950707118721	accepted	accepted
890920107218	CL0008	710909049732	950707118721	accepted	accepted
920812091120	CL0010	710909049732	950707118721	rejected	rejected
950802014321	CL0009	910909047731	900129036723	accepted	accepted
970915128821	CL0001	910909047731	900129036723	accepted	accepted
970915128821	CL0002	910909047731	900129036723	accepted	pending
970915128821	CL0003	910909047731	900129036723	accepted	accepted
970915128821	CL0004	910909047731	900129036723	accepted	rejected
970907042311	CL0005	910909047731	900129036723	accepted	rejected
900819063226	CL0006	910909047731	900129036723	accepted	rejected

SUPERVISORID	SUPERVISORNAME	SUPERVISORDATEOFHIRED	SUPERVISORPHONENUMBER
910909047731	Ran Takahashi	20-APR-09	60167219928
710909049732	Catalina Martin	20-DEC-05	60195598123

BRANCHMANAGERNAME	BRANCHMANAGERID	BRANCHMANAGERPHONENUMBER	BRANCHMANAGERDATEOFHIRE
Lee Zii Jia	900129036723	60182321123	20-MAR-10
Chen Dong Ping	950707118721	60192314456	19-APR-10

INJURYID	MEDICALREPORTID	DATEOFINJURY	INJURYCATEGORY
INJ0001	MR0000	28-DEC-21	minor
INJ0009	MR0006	29-SEP-21	major
INJ0002	MR0001	09-FEB-21	minor
INJ0003	MR0000	09-MAR-21	minor
INJ0004	MR0000	10-APR-21	minor
INJ0005	MR0002	10-MAY-21	major
INJ0006	MR0003	19-JUN-21	major
INJ0007	MR0004	01-JUL-21	major
INJ0008	MR0005	09-AUG-21	major
INJ0010	MR0007	15-DEC-21	major

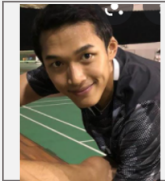
MEDICALREPORTID	DOCTORNAME	HOSPITALNAME	HOSPITALPOSTCODE	INJURYDESCRIPTION	DAYSOFSTAYSINHOSPITAL
HR0000	10000	...	3
HR0001	Dr Cinta Laura	Hospital Duchess of Kent	88450	Severe sprained ankle	3
HR0002	Dr Carlisle Cullen	Phoenix Central Hospital	49500	Skull breakage	7
HR0003	Dr Zhang Jie	Phoenix Central Hospital	90705	Skull breakage	7
HR0004	Dr Allison Dilaurentis	Rosewood Hospital	80605	Broken toe	5
HR0005	Dr Mona Van der Waal	Rosewood Hospital	80605	Splinter due to excessive heat	4
HR0006	Dr Zhang Jie	Phoenix Central Hospital	90705	Fatigued hand syndrome	1
HR0007	Dr Meredith Gray	Phoenix Central Hospital	49500	Slipped intervertebral disc	1
HR0008	Dr Carlisle Cullen	Phoenix Central Hospital	49500	Covid19	5
HR0009	Dr Carlisle Cullen	Phoenix Central Hospital	49500	Covid19	2
HR0010	Dr Carlisle Cullen	Phoenix Central Hospital	49500	Covid19	1

1.5 Theoretical Queries

1) view Employee details with ID number

π employeeID, employeeName, employeePhoneNumber, employeeDateofHire, employeePosition σ (employeeID = '970915128821') (EMPLOYEE)

Compensation Department



Identification Number:	970915-12-8821
Name:	Jojo Christie
Phone Number:	60189923457
Date of Hire:	31 July 2019
Position:	Corporalki Wind Summoner

Is the information shown above valid?

YES

NO

2) when 'Yes' is clicked, the prompt will view the dates of issuance for the employee specified

π dateofissue σ (employeeID = '970915128821' (EMPLOYEE \bowtie employeeID EMPLOYEECLAIM \bowtie claimID CLAIM))

Compensation Department

Choose which Date of Issuance would you like to see the details regarding the claims on:

1 January 2021

10 February 2021

13 March 2021

15 April 2021

Identification Number: 970915-12-8821

3) when the date is clicked, we can view the claims status for the date specified

assumption:

- to check for employee with id number 970915128821'
- the date 1 January 2021 is clicked to check for the claim status of this date

π dateofInjury, claimID, injuryCategory, medicalReportID, supervisorApprovalStatus, branchManagerApprovalStatus, claimstatus, claimTotal σ (employeeID = '970915128821', dateofIssue = '1 January 2021' (EMPLOYEE \bowtie employeeID EMPLOYEECLAIM \bowtie claimID CLAIM \bowtie medicalReportID MEDICALREPORT \bowtie injuryID INJURY))

Compensation Department

1 January 2021	
Claim ID	CL0001
Date of Injury	28 December 2021
Injury Category	Minor Injury
Medical Report ID	Null (INDICATED BY MEDICAL REPORT ID = 'MR0000')
Supervisor Approval Status	Approved
Branch Manager Approval Status	Approved
Claim Status:	Accepted
Claim total (RM):	300

Identification Number: 970915-12-8821

assumption:

- to check for employee with id number 970915128821'
- the date 10 February 2021 is clicked to check for the claim status of this date

π dateofInjury, claimID, injuryCategory, medicalReportID, supervisorApprovalStatus, branchManagerApprovalStatus, claimstatus, claimTotal σ (employeeID = '970915128821', dateofIssue = '10 February 2021' (EMPLOYEE \bowtie employeeID EMPLOYEECLAIM \bowtie claimID CLAIM \bowtie medicalReportID MEDICALREPORT \bowtie injuryID INJURY))

Compensation Department

10 February 2021	
Claim ID	CL0002
Date of Injury	9 February 2021
Injury Category	Major Injury
Medical Report ID	MR001
Supervisor Approval Status	Approved
Branch Manager Approval Status	Approved
Claim Status:	Accepted
Claim total (RM):	300

Identification Number: 970915-12-8821

4) View the supervisor in charge for the approval status

assumption:

- to check for the details of the supervisor the is in charge for the approval status of the employee above (id = 970915128821)
- the "approved" next to the supervisor approval status is clicked for this query to view the details of the supervisor

π supervisorName, supervisorID, supervisorPhoneNumber, supervisorDateofHire σ (employeeID = 970915128821 (EMPLOYEE \bowtie employeeID EMPLOYEECLAIM \bowtie supervisorID SUPERVISOR))

Compensation Department

Supervisor	
Supervisor name:	Ran Takahashi
Supervisor IC Number	910909047731
Supervisor Phone Number:	60167219928
Date of hire:	20 April 2009

Identification Number: 970915-12-8821

5) view the branch manager in charge for the approval status

assumption:

- to check for the details of the branch manager the is in charge for the approval status of the employee above (id = 970915128821)
- Claim id = 'CL0001'
- the "approved" next to the branch manager approval status is clicked for this query to view the details of the supervisor

π branchManagerName, branchManagerID, branchManagerPhoneNumber, branchManagerDateofHire σ (claimID = 'CL0001' (CLAIM \bowtie employeeID EMPLOYEECLAIM \bowtie branchManagerID BRANCHMANAGER))

Compensation Department

Branch Manager	
Branch Manager Name:	Lee Zii Jia
Branch Manager IC Number:	900129-03-6723
Branch Manager Phone Number:	60182321123
Date of hire:	20 March 2010
Branch postcode	89000

Identification Number: 970915-12-8821

6) view the medical report involved

assumption:

- to check for the details of the medical report issued for employee of id 970915128821 which is for the claim issued on 10 February 2021.
- This query is done by clicking on the Medical report ID in the claim report of this date.

π doctorName, hospitalName, hospitalPostcode, injuryDescription, dayofstayinhospital σ (employeeID = 970915128821 (EMPLOYEE \bowtie employeeID EMPLOYEECLAIM \bowtie claimID CLAIM \bowtie injuryID INJURY \bowtie medicalReportID MEDICALREPORT))

Compensation Department

Medical Report ID: MR001	
Medical Report Issued by:	Dr Cinta Laura Kiehl
Hospital	Hospital Duchess of Kent
Hospital postcode	88450
Injury description	Severe sprained ankle
Days of stays in hospital	2

Identification Number: 970915-12-8821

7) annual report for which year

Assume: to view report so far in 2021.

π count(ClaimID) (Claim)

π sum(claimcost) σ (claimStatus = 'accepted') (CLAIM)

π claimID σ (claimStatus = 'rejected') (CLAIM)

Compensation Department

2021

Number of claims made:	10
The compensation cost:	1300
List of rejected claims:	CL0004 CL0005, CL0006

1.6 Practical Queries

Based on the theoretical queries in 1.5, below are some of the practical queries.

1) view Employee details with ID number = 970915128821

```
select employeeID, employeeName, employeePhoneNumber, employeeDateOfHire
from employee
where employeeID = '970915128821'
```

EMPLOYEEID	EMPLOYEENAME	EMPLOYEEPHONENUMBER	EMPLOYEEDATEOFHIRE
970915128821	Jojo Christie	60189923457	31-JUL-19

2) view the dates of issuance for the employee specified (for employee Jojo Christie)

```

select cl.dateofIssue
from claim cl, employeeclaim ec, employee em
where em.employeeID = ec.employeeID
and ec.claimID = cl.claimID
and em.employeeID = 970915128821

```

DATEOFISSUE
01-JAN-21
10-FEB-21
13-MAR-21
15-APR-21

3) (a) view the claims status for the date specified for 1 January 2021, issued by employee Jojo Christie (ID : 970915128821)

In the table, it only shows the date of injury, not the date of issue (1 January 2021)

```

select ij.dateofInjury, cl.claimID, ij.injurycategory, ec.supervisorapproval,
ec.branchmanagerapproval, cl.claimstatus, cl.claimcost
from employee em, claim cl, medicalreport mr, injury ij, employeeclaim ec
where em.employeeID = ec.employeeID
and em.employeeID = 970915128821
and ec.claimID = cl.claimID
and cl.injuryID = ij.injuryID
and ij.medicalreportID = mr.medicalreportID
and cl.dateofissue = '1-jan-2021'

```

DATEOFINJURY	CLAIMID	INJURYCATEGORY	SUPERVISORAPPROVAL	BRANCHMANAGERAPPROVAL	CLAIMSTATUS	CLAIMCOST
28-DEC-21	CL0001	minor	accepted	accepted	accepted	300

4) View the supervisor in charge for the approval status for Jojo Christie

```

select su.supervisorID, su.supervisorName, su.supervisorDateofHired, su.supervisorPhoneNumber
from supervisor su, employeeclaim ec
where su.supervisorid = ec.supervisorid
and ec.employeeid = '970915128821'

```

SUPERVISORID	SUPERVISORNAME	SUPERVISORDATEOFHIRED	SUPERVISORPHONENUMBER
910909047731	Ran Takahashi	20-APR-09	60167219928

5) view the branch manager in charge to approve Jojo Christie's claim of ID CL0001.

```

select bm.branchmanagerName, bm.branchmanagerid, bm.branchManagerPhoneNumber, bm.branchManagerDateofHire
from branchmanager bm, employeeclaim ec
where ec.branchmanagerID = bm.branchmanagerid
and ec.claimID = 'CL0001'

```

BRANCHMANAGERNAME	BRANCHMANAGERID	BRANCHMANAGERPHONENUMBER	BRANCHMANAGERDATEOFHIRE
Lee Zii Jia	900129036723	60182321123	20-MAR-10

6) view the medical report

```

select mr.medicalreportid, mr.doctorname, mr.hospitalname, mr.hospitalpostcode, mr.injurydescription, mr.daysofstaysinhospital
from medicalreport mr, injury ij, employeeclaim ec, claim cl
where mr.medicalreportid = ij.medicalreportid
and cl.injuryid = ij.injuryid
and ec.claimid = cl.claimid
and ec.employeeid = '970915128821'
and mr.medicalreportid <> 'MR0000'

```

MEDICALREPORTID	DOCTORNAME	HOSPITALNAME	HOSPITALPOSTCODE	INJURYDESCRIPTION	DAYSOFSTAYSINHOSPITAL
MR0001	Dr Cinta Laura	Hospital Duchess of Kent	88450	Severe sprained ankle	3

7) annual report for year 2021

To see the total times a compensation claim is made.

```

select count(cl.claimid)
from claim cl

```

COUNT(CL.CLAIMID)
10

To see the sum of the compensation claim issued by the company.

```

select sum(claimcost)
from claim
where Claimstatus = 'accepted'

```

SUM(CLAIMCOST)
1300

To see the list of claims rejected by the company.

```

select claimid
from claim
where Claimstatus = 'rejected'

```

CLAIMID
CL0004
CL0005
CL0006
CL0010