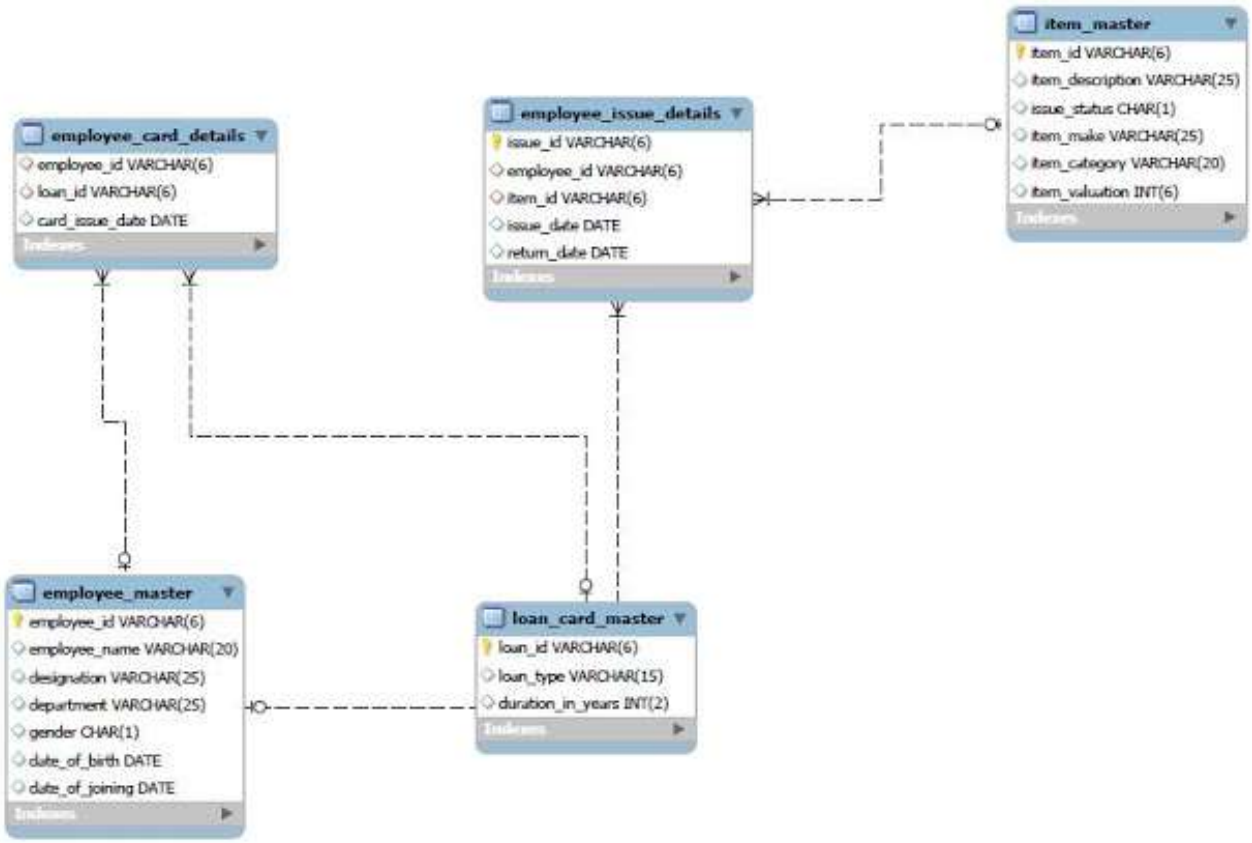


```
CREATE DATABASE new_loanq;

USE new_loanq;


CREATE TABLE loan_card_master

(

        loan_id                 int(6)          PRIMARY KEY,

        loan_type               varchar(20),
```

```
	duration_in_years	int(2)
);

CREATE TABLE employee_master
(
	employee_id		varchar(10)		PRIMARY KEY,
	employee_name		varchar(30),
	designation		varchar(15),
	gender			varchar(6),
	department		varchar(20),
	date_of_birth		date,
	date_of_joining		date
);

CREATE TABLE item_master
(
	item_id			varchar(10)		PRIMARY KEY,
	item_description	varchar(50),
	issue_status		varchar(10),
	item_make		varchar(20),
	item_category		varchar(20),
	item_valuation		double(7,2)
);

CREATE TABLE employee_card_details
```

```
(
        employee_id             varchar(10)     REFERENCES      employee_master,
        loan_id                 varchar(10)             REFERENCES      loan_card_master,
        card_issue_date         date
);

CREATE TABLE employee_issue_details
(
        issue_id                varchar(10)             PRIMARY KEY,
        employee_id             varchar(10)     REFERENCES      employee_master,
        item_id                 varchar(10)             REFERENCES      item_master,
        issue_date              date,
        return_date             date
);

insert into loan_card_master
values(00001,'stationary',5);
insert into loan_card_master
values(00002,'recurring',1);
insert into loan_card_master
values(00003,'fixed',4);
insert into loan_card_master
values(00004,'recurring',5);
insert into loan_card_master
values(00005,'stationary',3);
```

```
insert into loan_card_master
values(00006,'fixed',2);
insert into loan_card_master
values(00007,'recurring',1);
insert into loan_card_master
values(00008,'stationary',3);



select * from employee_master;

insert into employee_master
values('E001','ram','pat','male','hr','1988-04-01','2001-02-14');

insert into employee_master
values('E002','sashi','cat','male','account','1967-02-10','2010-02-04');

insert into employee_master
values('E003','prerna','trainee','female','hr','1990-10-09','2010-10-14');

insert into employee_master
values('E004','pratik','assoc','male','prod','1988-05-12','2005-02-12');

insert into employee_master
values('E005','ram','trainee','male','prod','1978-04-03','2001-02-14');
```

```
insert into employee_master
values('E006','ram','pat','male','account','1968-02-05','2007-01-04');

insert into employee_master
values('E007','vivek','assoc','male','hr','1958-09-05','2006-03-12');

insert into employee_master
values('E008','garima','cat','female','account','1990-12-11','2007-04-01');

insert into employee_master
values('E009','ramesh','pat','male','prod','1992-04-04','1998-05-06');

insert into employee_master
values('E010','jatin','assoc','male','account','1994-07-12','2012-01-04');

insert into employee_master
values('E011','sonam','pat','female','prod','1996-03-01','2013-07-03');

insert into employee_master
values('E012','surya','pat','female','prod','1996-03-01','2013-07-03');

insert into item_master
values ('i001','iugiuhou','yes','hand','furniture',2000);
```

```
insert into item_master
values ('i002','iugiuhou','no','contract','product',2050);

insert into item_master
values ('i003','iugiuhou','yes','hand','furniture',3000);

insert into item_master
values ('i004','iugiuhou','no','contract','product',7000);

insert into item_master
values ('i005','iugiuhou','no','hand','furniture',8000);

insert into item_master
values ('i006','iugiuhou','yes','machine','product',10000);

insert into item_master
values ('i007','iugiuhou','yes','contract','furniture',7000);

insert into item_master
values ('i008','iugiuhou','no','machine','product',5000);

insert into item_master
values ('i009','iugiuhou','no','hand','product',4000);
```

```
insert into item_master
values ('i010','iugiuhou','yes','machine','furniture',1000);

insert into item_master
values ('i013','iugiuhou','yes','machine','product',2000);

insert into employee_card_details
values('e001','00001','2013-10-09');

insert into employee_card_details
values('e005','00005','2011-04-10');

insert into employee_card_details
values('e008','00003','2009-06-04');

insert into employee_card_details
values('e007','00009','2003-02-01');

insert into employee_issue_details
values('iss001','e002','i007','2013-10-02','2013-11-11');
insert into employee_issue_details
```

values('iss009','e002','i006','2012-10-02','2013-09-04');

insert into employee_issue_details

values('iss010','e002','i007','2011-04-02','2013-11-01');

insert into employee_issue_details

values('iss011','e002','i003','2010-07-02','2013-11-03');

insert into employee_issue_details

values('iss002','e001','i006','2014-03-02','2014-11-11');

insert into employee_issue_details

values('iss003','e009','i001','2012-01-02','2013-03-05');

insert into employee_issue_details

values('iss004','e004','i003','2010-03-02','2011-06-01');

insert into employee_issue_details

values('iss012','e004','i007','2009-03-04','2009-11-01');

insert into employee_issue_details

values('iss013','e004','i007','2008-08-02','2008-09-09');

insert into employee_issue_details

values('iss014','e004','i006','2011-03-07','2011-06-01');

insert into employee_issue_details

```
values('iss005','e007','i010','2009-04-02','2009-07-07');

insert into employee_issue_details
values('iss006','e009','i007','2010-05-02','2012-12-08');


insert into employee_issue_details
values('iss016','e009','i013','2010-05-02','2012-12-08');

insert into employee_issue_details
values('iss007','e004','i010','2013-10-02','2013-11-11');

select * from item_master;

insert into employee_issue_details
values('iss021','e012','i001','2013-10-02','2013-11-11');
insert into employee_issue_details
values('iss022','e012','i001','2010-03-02','2011-06-01');

insert into employee_issue_details
values('iss023','e012','i005','2009-03-04','2009-11-01');
insert into employee_issue_details
values('iss024','e012','i005','2008-08-02','2008-09-09');
insert into employee_issue_details
values('iss025','e012','i005','2011-03-07','2011-06-01');
```

```
select * from employee_issue_details;

select * from employee_card_details;

select * from item_master;

select * from employee_master;

select * from loan_card_master;


/*----------------QUERIES---------------------*/


/*

01. Display distinct Employee id, Employee name who kept the item issued for more than a year.

*/


select distinct em.employee_id, employee_name

from employee_master em, employee_issue_details eid

where em.employee_id=eid.employee_id

and (datediff(return_date,issue_date)/365) >1;
```

/*

02. Count number of customers who have gone for loan type Stationary.

*/

```
select count(employee_id)
from loan_card_master lcm, employee_card_details ecd
where lcm.loan_id=ecd.loan_id
and loan_type='Stationary';
```

/*

03. Display Category and number of item in that category.

*/

```
select item_category, count(item_id)
from item_master
group by item_category;
```

/*

04. Empid ,Emp Name who joined the company after 2005.

*/

```
select employee_id, employee_name, date_of_joining
from employee_master
where year(date_of_joining)>2005;
```

/*

05. Count gender and group by gender.

*/

```
select gender,count(employee_id)
from employee_master
group by gender;
```

/*

06. Count number of employees whose issue status is yes.

*/

```
select count(distinct em.employee_id), em.employee_id
from employee_master em, item_master im, employee_issue_details eid
where em.employee_id=eid.employee_id and im.item_id=eid.item_id
and issue_status='yes'
group by em.employee_id;
```

/*

08.Find the max of total valuation of employees whose purchase is in two different categories.

*/

```
select em.employee_id, employee_name, sum(item_valuation)
 from employee_master em, item_master im, employee_issue_details eid
 where em.employee_id=eid.employee_id and eid.item_id=im.item_id
 group by em.employee_id
```

```
 having sum(item_valuation) in(select max(c) from(select sum(item_valuation) c
 from item_master im, employee_issue_details eid, employee_master em
where im.item_id=eid.item_id and eid.employee_id=em.employee_id
group by em.employee_id)a) and count(distinct item_category)>=2
 order by em.employee_id;



/*



09.Display count of employees who have recieved loan.
*/

select count(employee_id), employee_id
from employee_card_details ecd
where loan_id in(select loan_id from loan_card_master)
group by employee_id;



SELECT count(DISTINCT employee_id),employee_id
 FROM employee_card_details
group by employee_id;
```

/*

10.Display emp id,emp name and no of furniture purchased by employee who purchased more than one furniture.

*/

```
select em.employee_id, employee_name, count(im.item_id)
from employee_master em, employee_issue_details eid, item_master im
where em.employee_id=eid.employee_id and eid.item_id=im.item_id and item_category='furniture'
group by em.employee_id
having count(im.item_id)>1;
```

/*

11. Details of issue id,emp id,name who had issued in product display in sorted order of issue_id.

*/

```
select issue_id, em.employee_id, employee_name
from employee_issue_details eid, item_master im, employee_master em
where im.item_id=eid.item_id and em.employee_id=eid.employee_id and item_category='product'
order by issue_id;
```

```
select * from employee_issue_details;

/*

12. Display customer who has not availed for loan

*/

select employee_id, employee_name

from employee_master

where employee_id not in( select employee_id from employee_card_details  where loan_id in(select loan_id from loan_card_master));

 select * from employee_card_details;

/*

14. Display emp records for whom never issued an item as a loan order based on emp id

*/
```

```
select employee_id, employee_name

from employee_master

where employee_id not in( select employee_id

from employee_card_details where loan_id in(select loan_id from loan_card_master))

and employee_id in(select employee_id from employee_issue_details);



/*



15. Display empid,name who has the highest valuation. if multiple records then display in order of emp id

*/


SELECT eid.employee_id, e.employee_name,sum(im.item_valuation)

FROM item_master im, employee_issue_details eid, employee_master e


WHERE im.item_id=eid.item_id AND e.employee_id=eid.employee_id

GROUP BY        e.employee_id

 HAVINGsum(im.item_valuation)=(SELECT max(c)

FROM   (SELECTsum(item_valuation) c

 FROM item_master im, employee_issue_details eid

          WHERE             im.item_id=eid.item_id

                                                                                GROUP

BY        eid.employee_id

                    )a
```

)

ORDER BY eid.employee_id;

/*

16. Display No. of emp in HR dept

*/

```
select count(employee_id)
from employee_master
where department='HR';
select * from employee_master;
```

/*

17. Display issue status and number of items of furniture based on issued and not issued

*/

```
select issue_status, count(item_id)
from item_master
where item_category='furniture'
group by issue_status;
select * from item_master where item_CATEGORY='FURNITURE';
```

/*

18. Display empid and total valuation of each employee where employee must have at least one product issued

*/

```
select * from employee_issue_details;
select * from item_master;

SELECT      eid.employee_id, e.employee_name,sum(im.item_valuation)
FROM        item_master im, employee_issue_details eid, employee_master e
WHERE       im.item_id=eid.item_id AND
                    e.employee_id=eid.employee_id
```

```
GROUP BY        e.employee_id
having  employee_id in (select employee_id from employee_issue_details
                                where item_id in (select item_id from item_master
                                where item_category='product'));



select * from employee_issue_details;

/*



19. Disp empid,name and count of categories of each emp having at least 2 categories
*/

SELECT em.employee_id, employee_name, count(item_category)
from employee_master em, employee_issue_details eid, item_master im
where im.item_id=eid.item_id and em.employee_id=eid.employee_id
group by em.employee_id
having count(distinct item_category)>=2;
```

/*

20. Display name of categories and no of items in each category and sort in order of no of items

*/

```
select item_category, count(item_id) c
from item_master im
group by item_category
order by c;
select * from item_master;
```

/*

20. Display empid,name with their total valuations.

*/

```
SELECT eid.employee_id, e.employee_name,sum(im.item_valuation)
FROM item_master im, employee_issue_details eid, employee_master e
WHERE im.item_id=eid.item_id AND
 e.employee_id=eid.employee_id
```

```
GROUP BY e.employee_id


HAVING          sum(im.item_valuation) IN (SELECT max(c) FROM (SELECTsum(item_valuation) c

 FROM item_master im, employee_issue_details eid

 WHERE im.item_id=eid.item_id


GROUP BY eid.employee_id

)a

)

ORDER BY eid.employee_id;
```

Key: (Part of) Primary Key
Filled Diamond: NOT NULL
Not filled Diamond: NULL
Red colored: (Part of) Foreign key
Blue lined Diamond: Simple attribute (no key)

Can be combined for example:
is a Red colored Key so it's a Primary Key which is also a Foreign Key
is a Yellow (non Red) Key so it's only a Primary Key
is a blue lined filled diamond so it's a NOT NULL simple attribute
is a red colored filled diamond so it's a NOT NULL Foreign Key
is a blue lined not filled diamond so it's a simple attribute which can be NULL
is a red colored not filled diamond so it's a Foreign Key which can be NULL