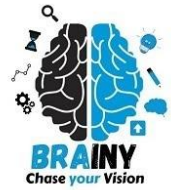
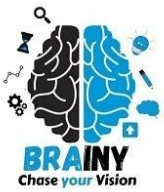
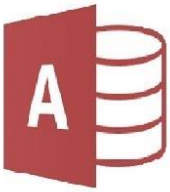
राष्ट्रीय प्रौद्योगिकी संस्थान वारंगल
National Institute of Technology Warangal | Department of Computer Science and Engineering







DATABASE MANAGEMENT SYSTEM

SOFTWARE COMPANY'S DATABASE

Team Members:

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ACKNOWLEDGEMENT

Inspiration and motivation play a key role in the success of any venture. Successful completion of any project requires proper guidance and help. We express our gratitude to the following people who have made this possible.

- We thank DBMS professor, **Dr. T Ramakrishnudu** for giving us the opportunity to delve deep into database concepts. Their lessons have been really helpful in learning the fundamental DBMS concepts like relations, E-R diagrams, Structured Query Language, functional dependencies, normalization, indexing, etc. in detail.

We extend our thanks to the whole CSE Department for being so helpful and available whenever we required any kind of guidance. The DBMS Lab faculty has also trained and made us practice the Structured Query Language with the help of the periodic assignments on Google Classroom.

- The students of CSE batch (II-Year) have been very interactive and healthy class discussions are always a boon for students.

- We thank the NITW management, Dean - Academic and Director - NITW, for giving us this opportunity to discover this subject in the course, and enter new avenues in the field of database management.

We also thank our parents, elders and well-wishers for being there with us and giving us all kinds of technical and moral support.

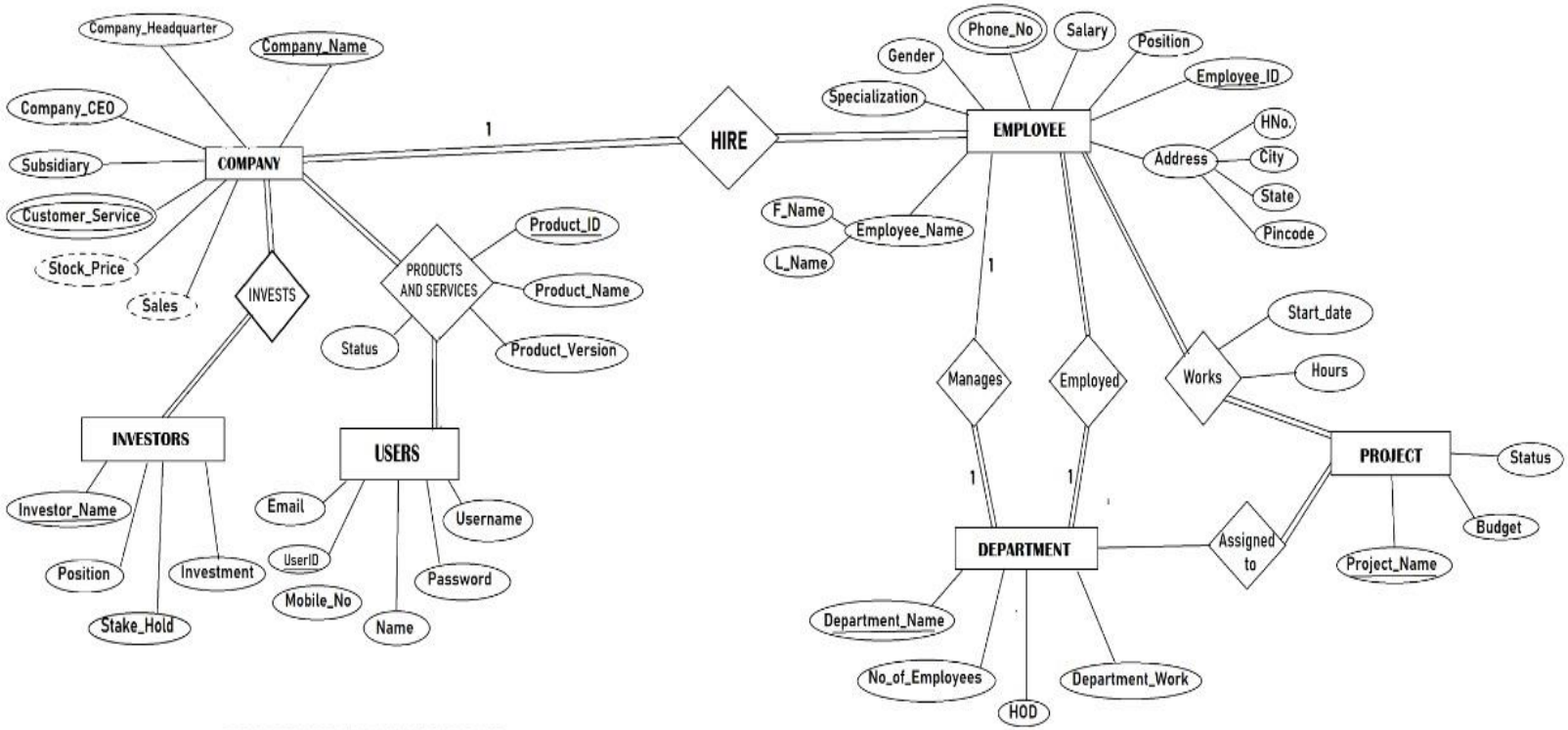
Problem Statement:

The project aims at designing the database management system for IT companies. The database contains all the important information regarding company, company services, investors, employees, workers and projects. This information would be readily available for the company executives and management which would play vital role in the proper functioning of the company.

The statistical data from the database can accurately determine the projects, employees in the company and also predict the status of the ongoing projects. The database is not only capable of tracing back products and services given to the user of the company. As the employees are linked to the projects through works, we can keep track of a particular project. The database links the company officials and company workers to the company headquarters thereby insuring proper management and sufficient task force at a particular project.

Thus, through the use of this database management system we can easily monitor functioning of a IT company.

ER-Diagram:



ER DIAGRAM FOR IT COMPANY DATABASE

207101 ABHISHEK
207201 ABHISHEK VERMA

Relations:

There are 14 relations in total, in this software company database model. Their structure as well as data are given below.

1. SOFTWARE_COMPANY

Attribute	Data_Type	Constraints and Characteristics
COMPANY NAME	VARCHAR2(30)	PRIMARY KEY
COMPANY HEADQUARTERS	VARCHAR2(40)	NOT NULL
COMPANY CEO	VARCHAR2(40)	NOT NULL
STOCK PRICE	NUMBER	NOT NULL
SALES	NUMBER	NOT NULL

2. COMPANY_SUBSIDIARY

Attribute	Data_Type	Constraints and Characteristics
SUBSIDIARY	VARCHAR2(40)	NOT NULL
COMPANY NAME	VARCHAR2(30)	FOREIGN KEY, NOT NULL

3. COMPANY_SERVICE

Attribute	Data_Type	Constraints and Characteristics
CUSTOMER SERVICE	VARCHAR2(30)	NOT NULL
COMPANY NAME	VARCHAR2(30)	FOREIGN KEY, NOT NULL

4. SOFTWARE_INVESTORS

Attribute	Data_Type	Constraints and Characteristics
INVESTOR NAME	VARCHAR2(30)	PRIMARY KEY
INVESTOR POSITION	VARCHAR2(20)	NOT NULL
STAKE HOLD	NUMBER	NOT NULL
INVESTMENT	NUMBER	NOT NULL

5. INVESTS

Attribute	Data_Type	Constraints and Characteristics
COMPANY NAME	VARCHAR2(30)	FOREIGN KEY, NOT NULL
INVESTOR NAME	VARCHAR2(30)	PRIMARY KEY

6. SOFTWARE_USERS

Attribute	Data_Type	Constraints and Characteristics
EMAIL	VARCHAR2(30)	NOT NULL
USERID	NUMBER	PRIMARY KEY
USER NAME	VARCHAR2(30)	NOT NULL
USER PASSWORD	VARCHAR2(20)	NOT NULL
USERNAME	VARCHAR2(30)	NOT NULL

7. USER_MOBILE

Attribute	Data_Type	Constraints and Characteristics
MOBILE NO	NUMBER	PRIMARY KEY
USERID	NUMBER	FOREIGN KEY, NOT NULL

8. PRODUCT_AND_SERVICES

Attribute	Data_Type	Constraints and Characteristics
PRODUCT ID	NUMBER	PRIMARY KEY
COMPANY NAME	VARCHAR2(30)	FOREIGN KEY, NOT NULL
USERID	NUMBER	FOREIGN KEY, NOT NULL
PRODUCT NAME	VARCHAR2(30)	NOT NULL
PRODUCT VERSION	VARCHAR2(30)	NOT NULL
STATUS	VARCHAR2(20)	NOT NULL

9. DEPARTMENT

Attribute	Data_Type	Constraints and Characteristics
DEPARTMENT NAME	VARCHAR2(30)	PRIMARY KEY
NO OF EMPLOYEE	NUMBER	NOT NULL
HOD NAME	VARCHAR2(30)	NOT NULL
DEPARTMENT WORK	VARCHAR2(30)	NOT NULL

10. EMPLOYEE

Attribute	Data_Type	Constraints and Characteristics
EMPLOYEE ID	NUMBER	PRIMARY KEY
HOUSENO	NUMBER	NOT NULL
CITY	VARCHAR2(10)	NOT NULL
EMP STATE	VARCHAR2(10)	NOT NULL
PINCODE	NUMBER	NOT NULL
EMP POSITION	VARCHAR2(20)	NOT NULL
SALARY	NUMBER	NOT NULL
GENDER	VARCHAR2(10)	NOT NULL
SPECIALIZATION	VARCHAR2(10)	NOT NULL
FIRST NAME	VARCHAR2(20)	NOT NULL
LAST NAME	VARCHAR2(20)	NOT NULL
COMPANY NAME	VARCHAR2(30)	FOREIGN KEY, NOT NULL
DEPARTMENT NAME	VARCHAR2(30)	FOREIGN KEY, NOT NULL

11. PHONE_NO

Attribute	Data_Type	Constraints and Characteristics
PHONENO	NUMBER	PRIMARY KEY
EMPLOYEEID	NUMBER	FOREIGN KEY, NOT NULL

12.SOFT_PROJECT

Attribute	Data_Type	Constraints and Characteristics
PROJECT NAME	VARCHAR2(30)	PRIMARY KEY
BUDGET	NUMBER	NOT NULL
STATUS	VARCHAR2(30)	NOT NULL

13. ASSIGNED_TO

Attribute	Data_Type	Constraints and Characteristics
DEPARTMENT NAME	VARCHAR2(30)	FOREIGN KEY, NOT NULL
PROJECT NAME	VARCHAR2(30)	PRIMARY KEY, FOREIGN KEY, NOT NULL

14. WORKS

Attribute	Data_Type	Constraints and Characteristics
START DATE	DATE	NOT NULL
WORKING HOURS	NUMBER	NOT NULL
PROJECT NAME	VARCHAR2(30)	FOREIGN KEY, NOT NULL
EMPLOYEE ID	NUMBER	PRIMARY KEY,FOREIGN KEY, NOT NULL

NORMALIZATION

1) SOFTWARE_COMPANY:
Company_Name -> {
Company_Headquarter,Company_ceo,Stock_price,Sales}

Here, $(Company\_Name)^+$ -> R

Hence, Company_Name is candidate key

And Company_Name is super key of R so it is in BCNF form

2) Company_Subsidiary:
Subsidiary -> {Company_Name}

Here , $(Subsidiary)^+$ -> R

Hence, Subsidiary is candidate key

Subsidiary is super key so it is in BCNF form

3) Company_service:
There is no functional dependency in this table

So table is in already BCNF form

4) SOFTWARE_INVESTORS:
Investor_Name -> {investor_position,Stake_Hold,Investment}

Here, $(Investor\_Name)^+$ -> R

Hence, Investor_Name is candidate key

Investor_Name is super key so it is in BCNF form

5) INVESTS:
There is no functional dependencies exist in this table

So table is in BCNF form

6) SOFTWARE_USERS:
UserID -> {Email,User_Name,User_Password,UserName}

Here , $(UserID)^+$ -> R

Hence , UserID is candiadte key

Also UserID is super key , so it is in BCNF form

7) User_Mobile:
Mobile_No -> {UserID}

Here, $(Mobile\_No)^+$ -> R

Hence, Mobile_No is candidate key

Also,Mobile_No is super key so it is in BCNF form

8) PRODUCT_AND_SERVICES:
Product_ID ->
{Company_Name,UserID,Product_Name,Product_version,status}

Here, $(Product\_ID)^+$ -> R

So, Product_ID is candidate key

Also, Product_ID is super key so it is in BCNF form

9) SOFTWARE_DEPARTMENT:
Department_Name ->
{No_OF_Employee,HOD_Name,Department_work}

Here , $(Department\_Name)^+$ -> R

So, Department_Name is candidate key

Also, Department_Name is super key so it is BCNF form

10) EMPLOYEE:
Employee_ID ->
{First_Name,Last_Name,Company_Name,Department_Name,

Specialization,Gender,Salary,EMP_Position,PinCode,Emp_state,City,HouseNO}

Here $(Employee\_ID)^+$ -> R

So, Employee_ID is candiadte key

Also, Employee_ID is super key So, it is in BCNF form

11) Phone_NO:
PhoneNO -> {Employee_ID}

Here $(PhoneNo)^+$ -> R

So, PhoneNo is candiadte key

Also, PhoneNo is super key So , it is in BCNF form

12) SOFT_PROJECT:
Project_Name -> {Budget,Status}

Here $(Project\_Name)^+$ -> R

So, Project_Name is candidate key

Also, Project_Name is super key . So, it is in BCNF form

13) ASSIGNED_TO:
Project_Name -> {Department_Name}

Here $(Project\_Name)^+$ -> R

So, Project Name is candidate key

Also, project_name is super key. So ,it is in BCNF form

14) WORKS:
Employee_ID -> {Start_date,Working_hours,Project_name}

Here $(Employee\_ID)^+$ -> R

So, Employee_ID is candiadte key

Also, Employee_ID is super key . So, it is in BCNF form

TABLES:

1.SOFTWARE_COMPANY

```
create table SOFTWARE_COMPANY
(
Company_Name varchar2(30) not null primary key,
Company_Headquarter varchar2(40),
Company_ceo varchar2(40),
Stock_price number,
Sales number
);

insert into SOFTWARE_COMPANY values('google','Mountain View, California, United States','Sundar Pichai',2225.54,161.9);

insert into SOFTWARE_COMPANY values('microsoft',' Albuquerque,New Mexico, United States','Satya Nadella', 253.54, 119.6);

insert into SOFTWARE_COMPANY values('amazon','Bellevue, Washington, United States','Andy Jassy',2129.55,153.9);

insert into SOFTWARE_COMPANY values('facebook','Cambridge, Massachusetts, United States',' Mark Zuckerberg ',190.54,99.9);

insert into SOFTWARE_COMPANY values('oracle','Austin, Texas, United States','Larry Ellison',70.54,110.9);
```

SELECT * FROM SOFTWARE_COMPANY;

	COMPANY_NAME	COMPANY_HEADQUARTER	COMPANY_CEO	STOCK_PRICE	SALES
1	google	Mountain View, California, United States	Sundar Pichai	2225.54	161.9
2	microsoft	Albuquerque, New Mexico, United States	Satya Nadella	253.54	119.6
3	amazon	Bellevue, Washington, United States	Andy Jassy	2129.55	153.9
4	facebook	Cambridge, Massachusetts, United States	Mark Zuckerberg	190.54	99.9
5	oracle	Austin, Texas, United States	Larry Ellison	70.54	110.9

2.COMPANY_SUBSIDIARY:

```
create table Company_Subsidiary
(
Subsidiary varchar2(40),
Company_Name varchar2(30),
foreign key (Company_Name) references
SOFTWARE_COMPANY(Company_Name)
);
```

```
insert into Company_subsidiary values('Aconex','oracle');
insert into Company_subsidiary values('Taleo','oracle');
insert into Company_subsidiary values('waymo','google');
insert into Company_subsidiary values('deepmind','google');
insert into Company_subsidiary values('github','microsoft');
insert into Company_subsidiary values('Linkedin','microsoft');
insert into Company_subsidiary values('zappos','amazon');
```

```
insert into Company_subsidiary values('audible','amazon');
insert into Company_subsidiary values('whatsapp','facebook');
insert into Company_subsidiary values('giphy','facebook');

SELECT * FROM Company_susidiary;
```

	SUBSIDIARY	COMPANY_NAME
1	Aconex	oracle
2	Taleo	oracle
3	waymo	google
4	deepmind	google
5	github	microsoft
6	Linkedin	microsoft
7	zappos	amazon
8	audible	amazon
9	whatsapp	facebook
10	giphy	facebook

3.COMPANY_SERVICE:

```
create table Company_service(
Customer_Service varchar2(30),
Company_Name varchar2(30),
foreign key (Company_Name) references
SOFTWARE_COMPANY(Company_Name)
);
insert into Company_service values('facebook Lite','facebook');
insert into Company_service values('instagram','facebook');
insert into Company_service values('instagram reels','facebook');
insert into Company_service values('amazon web services',
'amazon');
insert into Company_service values('amazon prime','amazon');
insert into Company_service values('amazon business','amazon');
insert into Company_service values('bing','microsoft');
insert into Company_service values('microsoft 365','microsoft');
insert into Company_service values('google cloud','google');
insert into Company_service values('google maps','google');
insert into Company_service values('google photos','google');
insert into Company_service values('cloud applications','oracle');
insert into Company_service values('bank and insurance','oracle'
);
```

```
SELECT * FROM Company_service;
```

	CUSTOMER_SERVICE	COMPANY_NAME
1	facebook Lite	facebook
2	instagram	facebook
3	instagram reels	facebook
4	amazon web services	amazon
5	amazon prime	amazon
6	amazon business	amazon
7	bing	microsoft
8	microsoft 365	microsoft
9	google cloud	google
10	google maps	google
11	google photos	google
12	cloud applications	oracle
13	bank and insurance	oracle

4.SOFTWARE_INVESTORS:

```
create table SOFTWARE_INVESTORS
(
        Investor_Name varchar2(30) not null primary key,
        investor_position varchar2(20),
        Stake_Hold number,
        Investment number
);
insert into SOFTWARE_INVESTORS values('abhishek verma',
'equity holder',1.2,16);
insert into SOFTWARE_INVESTORS values('divyansh dubey', 'DBT',
2,23);
insert into SOFTWARE_INVESTORS values('yatharth garg', 'DBT',
3,34);
insert into SOFTWARE_INVESTORS values('subham choudhary',
'equity holder',1.5,19);
insert into SOFTWARE_INVESTORS values('rohit kumar','equity
holder',1.4,18);
insert into SOFTWARE_INVESTORS values('kartik gauda','equity
holder',1.7,21);
```

SELECT * FROM SOFTWARE_INVESTORS;

	INVESTOR_NAME	INVESTOR_POSITION	STAKE_HOLD	INVESTMENT
1	abhishek yadav	equity holder	1	12
2	abhishek verma	equity holder	1.2	16
3	divyansh dubey	DBT	2	23
4	yatharth garg	DBT	3	34
5	subham choudhary	equity holder	1.5	19
6	rohit kumar	equity holder	1.4	18
7	kartik gauda	equity holder	1.7	21

5.INVESTS:

```
create table INVESTS
(
Company_Name varchar2(30),
Investor_Name varchar2(30),
foreign key (Company_Name) references
SOFTWARE_COMPANY(Company_Name),
foreign key (Investor_Name) references
SOFTWARE_INVESTORS(Investor_Name)
);
insert into INVESTS values('google','abhishek yadav');
insert into INVESTS values('oracle','abhishek yadav');
insert into INVESTS values('google','abhishek verma');
insert into INVESTS values('microsoft','abhishek verma');
```

```
insert into INVESTS values('facebook','abhishek verma');
insert into INVESTS values('amazon','abhishek yadav');
insert into INVESTS values('amazon','divyansh dubey');
insert into INVESTS values('oracle','divyansh dubey');
insert into INVESTS values('amazon','yatharth garg');
insert into INVESTS values('facebook','yatharth garg');
insert into INVESTS values('google','rohit kumar');
insert into INVESTS values('facebook','subham choudhary');
insert into INVESTS values('microsoft','kartik gauda');
```

```
SELECT * FROM INVESTS;
```

	COMPANY_NAME	INVESTOR_NAME
1	google	abhishek yadav
2	oracle	abhishek yadav
3	google	abhishek verma
4	microsoft	abhishek verma
5	facebook	abhishek verma
6	amazon	abhishek yadav
7	amazon	divyansh dubey
8	oracle	divyansh dubey
9	amazon	yatharth garg
10	facebook	yatharth garg
11	google	rohit kumar
12	facebook	subham choudhary
13	microsoft	kartik gauda

6.SOFTWARE_USERS:

```
create table SOFTWARE_USERS
(
Email varchar2(30),
UserID number not null primary key,
User_Name varchar2(30),
User_Password varchar2(20),
UserName varchar2(30)
);
insert into SOFTWARE_USERS
values('joseph1245@gmail.com',1452,'joseph ite', 'joseph#1245',
'josite145');
insert into SOFTWARE_USERS
values('sam456@gmail.com',1456,'sam henry', 'sam@123',
'1452sam');
insert into SOFTWARE_USERS
values('abraham478@gmail.com',1420,'abraham anand',
'anand$523','aa1453');
insert into SOFTWARE_USERS
values('peter632@gmail.com',1548,'peter parker', 'pp@#632',
'petper25');
insert into SOFTWARE_USERS
values('tomlary@gmail.com',1956,'tom lary','lary@14','lary45');
```

```
insert into SOFTWARE_USERS
values('cristiana@gmail.com',1632,'cristiana','cris@23','crisk4589')
;

insert into SOFTWARE_USERS values ('loratom46@gmail.com',
1234,'tom lora','tom#203','lorat145');

SELECT * FROM SOFTWARE_USERS;
```

	EMAIL	USERID	USER_NAME	USER_PASSWORD	USERNAME
1	joseph1245@gmail.com	1452	joseph ite	joseph#1245	josite145
2	sam456@gmail.com	1456	sam henry	sam@123	1452sam
3	abraham478@gmail.com	1420	abraham anand	anand$523	aa1453
4	peter632@gmail.com	1548	peter parker	pp@#632	petper25
5	tomlary@gmail.com	1956	tom lary	lary@14	lary45
6	cristiana@gmail.com	1632	cristiana	cris@23	crisk4589
7	loratom46@gmail.com	1234	tom lora	tom#203	lorat145

7.USER_MOBILE:

```
create table User_Mobile
(
Mobile_No number,
UserID number,
foreign key (UserID) references SOFTWARE_USERS(UserID)
);

insert into User_Mobile values(7485961234,1452);

insert into User_Mobile values(9874561235,1456);
```

```
insert into User_Mobile values(7451829635,1452);
insert into User_Mobile values(8451796321,1420);
insert into User_Mobile values(8479569845,1548);
insert into User_Mobile values(8457988899,1956);
insert into User_Mobile values(7458998563,1632);
insert into User_Mobile values(8231225633,1234);
insert into User_Mobile values(9124578463,1456);
insert into User_Mobile values(9147778875,1956);
```

```
SELECT * FROM User_Mobile;
```

	MOBILE_NO	USERID
1	7485961234	1452
2	9874561235	1456
3	7451829635	1452
4	8451796321	1420
5	8479569845	1548
6	8457988899	1956
7	7458998563	1632
8	8231225633	1234
9	9124578463	1456
10	9147778875	1956

8.PRODUCT_AND_SERVICES:

```
create table PRODUCT_AND_SERVICES
(
Product_ID number not null primary key,
Company_Name varchar2(30),
UserID number,
product_Name varchar2(30),
Product_Version varchar2(30),
Status varchar2(20),
foreign key (Company_Name) references
SOFTWARE_COMPANY(Company_Name),
foreign key (UserID) references SOFTWARE_USERS(UserID)
);
```

```
insert into PRODUCT_AND_SERVICES
values(14,'google',1420,'google chrome','0.1.154','free');
insert into PRODUCT_AND_SERVICES
values(04,'amazon',1632,'amazon prime','0.1.456','paid');
insert into PRODUCT_AND_SERVICES
values(23,'amazon',1234,'amazon web services','0.16.184','paid');
insert into PRODUCT_AND_SERVICES
values(16,'microsoft',1956,'microsoft 365','0.2.454','paid');
```

```
insert into PRODUCT_AND_SERVICES values(19,'oracle',1452,'sql developer','0.20.478','free');

insert into PRODUCT_AND_SERVICES values(08,'facebook',1548,'whatsapp','0.1.471','free');

insert into PRODUCT_AND_SERVICES values(09,'microsoft',1452,'window 11','0.63.145','free');

insert into PRODUCT_AND_SERVICES values(20,'google',1632,'google maps','0.20.198','free');

insert into PRODUCT_AND_SERVICES values(21,'facebook',1956,'instagram','0.01.136','free');
```

```
SELECT * FROM PRODUCT_AND_SERVICES;
```

	PRODUCT_ID	COMPANY_NAME	USERID	PRODUCT_NAME	PRODUCT_VERSION	STATUS
1	14	google	1420	google chrome	0.1.154	free
2	4	amazon	1632	amazon prime	0.1.456	paid
3	23	amazon	1234	amazon web services	0.16.184	paid
4	16	microsoft	1956	microsoft 365	0.2.454	paid
5	19	oracle	1452	sql developer	0.20.478	free
6	8	facebook	1548	whatsapp	0.1.471	free
7	9	microsoft	1452	window 11	0.63.145	free
8	20	google	1632	google maps	0.20.198	free
9	21	facebook	1956	instagram	0.01.136	free

9.SOFTWARE_DEPARTMENT:

```
create table SOFTWARE_DEPARTMENT
(
Department_Name varchar2(30) not null primary key,
No_Of_Employee number,
HOD_Name varchar2(30),
Department_work varchar2(40)
);
insert into PRODUCT_AND_SERVICES values (21,'facebook', 1956, 'instagram','0.01.136','free');
insert into SOFTWARE_DEPARTMENT values('design',463, 'simon', 'design for apps and websites');
insert into SOFTWARE_DEPARTMENT values('finance',562, 'jack', 'maintain finanace');
insert into SOFTWARE_DEPARTMENT values('marketing',124, 'charlie','work on market');
insert into SOFTWARE_DEPARTMENT values('engineering and technology',489,'tom stark','future products');
insert into SOFTWARE_DEPARTMENT values('business strategy', 365,'jagal','how to earn money from product');
insert into SOFTWARE_DEPARTMENT values('sales,services',784, 'rajesh','sell of product,online marketing');
```

SELECT * FROM SOFTWARE_DEPARTMENT;

	DEPARTMENT_NAME	NO_OF_EMPLOYEE	HOD_NAME	DEPARTMENT_WORK
1	design	463	simon	design for apps and websites
2	finance	562	jack	maintain finanace
3	marketing	124	charlie	work on market
4	engineering and technology	489	tom stark	future products
5	business strategy	365	jagal	how to earn money from product
6	sales,services	784	rajesh	sell of product,online marketing

10.EMPLOYEE:

```
create table EMPLOYEE(
Employee_ID number not null primary key,
HouseNO number,
City varchar2(10),
EMP_State varchar2(10),
PinCode number,
EMP_Position varchar2(20),
Salary number,
Gender varchar2(10),
Specialization varchar2(10),
First_Name varchar2(20),
Last_Name varchar2(20),
Company_Name varchar2(30),
Department_Name varchar2(30),
```

```
foreign key (Company_Name) references
SOFTWARE_COMPANY(Company_Name),

foreign key (Department_Name) references
SOFTWARE_DEPARTMENT(Department_Name)

);

insert into EMPLOYEE values (36,365, 'miami', 'florida', 984561,
'marketing', 1410000, 'female', 'marketing', 'jack', 'james',
'facebook' ,'marketing');

insert into EMPLOYEE values (41 ,345 ,'york' ,'york' ,415263,
'marketing', 1200000, 'male', 'finance', 'lemon', 'temon', 'google',
'marketing');


SELECT * FROM EMPLOYEE;
```

	EMPLOYEE_ID	HOUSENO	CITY	EMP_STATE	PINCODE	EMP_POSITION	SALARY	GENDER	SPECIALIZATION	FIRST_NAME	LAST_NAME	COMPANY_NAME	DEPARTMENT_NAME
1	36	365	miami	florida	984561	marketing	1410000	female	marketing	jack	james	facebook	marketing
2	41	345	york	york	415263	marketing	1200000	male	finance	lemon	temon	google	marketing

11.PHONE_NO:

```
create table Phone_NO
(
PhoneNO number,
Employee_ID number,
foreign key (Employee_ID) references EMPLOYEE(Employee_ID)
);
```

```
insert into Phone_NO values(7894561233,36);
insert into Phone_NO values(9874512633,36);
insert into Phone_NO values(8451223679,41);
insert into Phone_NO values(8218425120,41);

SELECT * FROM Phone_NO;
```

	PHONENO	EMPLOYEE_ID
1	7894561233	36
2	9874512633	36
3	8451223679	41
4	8218425120	41

12.SOFT_PROJECT:

```
create table SOFT_PROJECT
(
Project_Name varchar2(30) not null primary key,
Budget number,
Status varchar2(30)
);
insert into SOFT_PROJECT values('xyz',4500,'running');
insert into SOFT_PROJECT values('abc',3200,'completed');
```

```
insert into SOFT_PROJECT values('pqr',2100,'completed');
insert into SOFT_PROJECT values('lmn',8450,'running');

SELECT * FROM SOFT_PROJECT;
```

	PROJECT_NAME	BUDGET	STATUS
1	xyz	4500	running
2	abc	3200	completed
3	pqr	2100	completed
4	lmn	8450	running

13.ASSIGNED_TO:

```
create table ASSIGNED_TO
(
Department_Name varchar2(30),
Project_Name varchar2(30),
foreign key (Department_Name) references
SOFTWARE_DEPARTMENT(Department_Name),
foreign key (Project_Name) references
SOFT_PROJECT(Project_Name)
);
insert into ASSIGNED_TO values('finance','xyz');
insert into ASSIGNED_TO values('engineering and
technology','abc');
```

```
insert into ASSIGNED_TO values('business strategy','pqr');
insert into ASSIGNED_TO values('design','lmn');

SELECT * FROM ASSIGNED_TO;
```

	DEPARTMENT_NAME	PROJECT_NAME
1	finance	xyz
2	engineering and technology	abc
3	business strategy	pqr
4	design	lmn

14.WORKS:

```
create table WORKS
(
Start_date date,
Working_hours number,
Project_Name varchar2(30),
Employee_ID number,
foreign key (Project_Name) references
SOFT_PROJECT(Project_Name),
foreign key (Employee_ID) references EMPLOYEE(Employee_ID)
);
```

```
insert into WORKS values(to_date('10/11/2019','dd/mm/yyyy'), 8,
'xyz',41);

insert into WORKS values(to_date('12/08/2018', 'dd/mm/yyyy'), 7,
'xyz',36);

insert into WORKS values(to_date('18/09/2020','dd/mm/yyyy'), 8,
'pqr',36);

insert into WORKS values(to_date('26/08/2011','dd/mm/yyyy'), 9,
'pqr',41);
```

```
SELECT * FROM WORKS;
```

	START_DATE	WORKING_HOURS	PROJECT_NAME	EMPLOYEE_ID
1	10-NOV-19	8	xyz	41
2	12-AUG-18	7	xyz	36
3	18-SEP-20	8	pqr	36
4	26-AUG-11	9	pqr	41

THANK YOU