

# **TECHNICAL SKILLS DATA RETRIEVAL SYSTEM**

## **ABSTRACT:**

**Data retrieval** means obtaining data from a database management system such as ODBMS. In this case, it is considered that data is represented in a structured way, and there is no ambiguity in data.

In order to retrieve the desired data the user present a set of criteria by a query. Then the DATA BASE MANAGEMENT SYSTEM (DBMS), software for managing databases, selects the demanded data from the database. The retrieved data may be stored in a file, printed, or viewed on the screen.

A *query language*, such as STRUCTURED QUERY LANGUAGE (SQL), is used to prepare the queries. SQL is an ANSI standardized query language developed specifically to write database queries. Each DBMS may have its own language, but most relational .

# DBMS ASSIGNMENT -1

## TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

### REQUIREMENT ANALYSIS

#### LIST OF TABLES:

- TECHNICAL SKILLS
- LEARNEDBY
- STUDENTS
- CERTIFIEDIN
- COURSES

#### LIST OF ATTRIBUTES WITH THEIR DOMAIN TYPES:

##### 1. TECHNICAL SKILLS:

PROGRAMMING_SKILLS	VARCHAR2(20)
WEB	VARCHAR2(20)
GRAPHICAL	VARCHAR2(20)
COMPUTERSKILLS	CHAR(20)

##### 2. LEARNEDBY:

SINCE	DATE
SID	VARCHAR2(25)

##### 3. STUDENTS:

SID	VARCHAR2(15)
SNAME	VARCHAR2(25)
DOB	DATE
EMAIL	VARCHAR2(256)

YEAR	NUMBER(4)
BRANCH	VARCHAR2(6)

PASSEDON	DATE
SID	VARCHAR2(15)

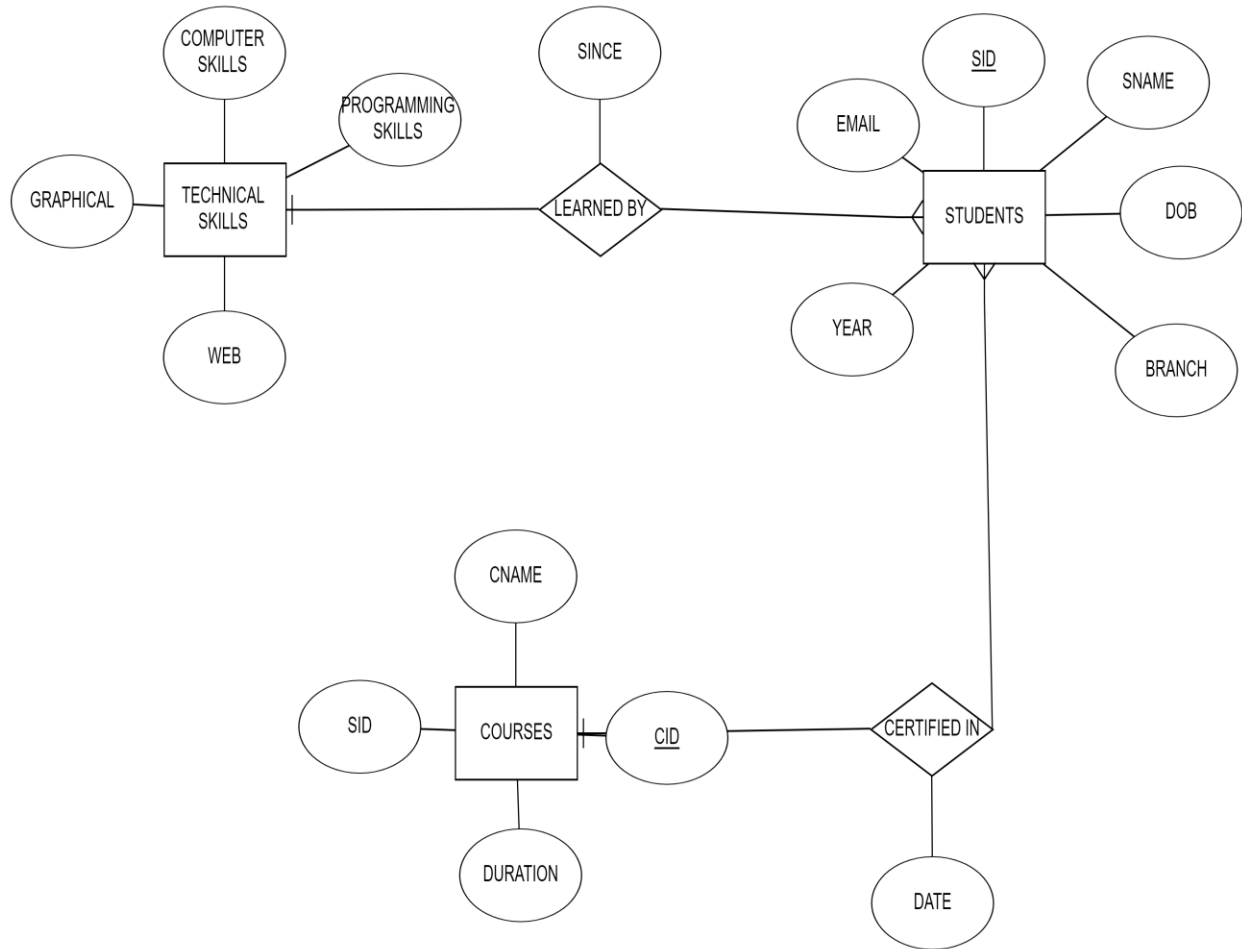
CID	VARCHAR2(15)
CNAME	VARCHAR2(25)
DURATION	VARCHAR2(6)
SID	VARCHAR2(15)

# DBMS ASSIGNMENT -1

## TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

ERDIAGRAM:



DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

## **MAPPING CARDINALITIES AND PARTICIPATION**

### **CONSTRAINTS:**

A Student can learn many courses ONE-MANY

Technical skills can be learned by any student and any number of students MANY-ONE

A Student can get certified in any number of courses.

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

**DDL AND DML COMMANDS:**

SQL> desc technicalskills;

Name	Null?	Type
-----		
PROGRAMMING_SKILLS		VARCHAR2(20)
WEB		VARCHAR2(20)
GRAPHICAL		VARCHAR2(20)
COMPUTERSKILLS		CHAR(20)

SQL> desc students;

Name	Null?	Type
-----		
SID	NOT NULL	VARCHAR2(15)
SNAME		VARCHAR2(25)
DOB		DATE
EMAIL		VARCHAR2(256)
YEAR		NUMBER(4)
BRANCH		VARCHAR2(6)

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

```
SQL> CREATE TABLE learnedby(  
2  since DATE,  
3  sid varchar(25),  
4  foreign key(sid) references students);
```

Table created.

```
SQL> desc learnedby;
```

Name	Null?	Type
-----		
SINCE		DATE
SID		VARCHAR2(25)

```
SQL> CREATE TABLE courses(  
2  cid varchar(15),  
3  cname varchar(25),  
4  duration varchar(6),  
5  sid varchar(15),  
6  foreign key(sid) references students,  
7  primary key(cid,sid));
```



DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

Table created.

```
SQL> CREATE TABLE certified_in(  
2  passedon DATE,  
3  sid varchar(15),  
4  foreign key(sid) references students);
```

Table created.

```
SQL> insert into technicalskills  
values('&programming_skills','&web','&graphical','&computerskills');
```

Enter value for programming\_skills: sql

Enter value for web: html

Enter value for graphical: photoshop

Enter value for computerskills: msoffice

```
old 1: insert into technicalskills  
values('&programming_skills','&web','&graphical','&computerskills')
```

```
new 1: insert into technicalskills  
values('sql','html','photoshop','msoffice')
```

1 row created.

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

SQL> /

Enter value for programming\_skills: c

Enter value for web: java script

Enter value for graphical: free hand

Enter value for computerskills: powerpoint

old 1: insert into technicalskills

values('&programming\_skills','&web','&graphical','&computerskills')

new 1: insert into technicalskills values('c','java script','free  
hand','powerpoint')

1 row created.

SQL> /

Enter value for programming\_skills: java

Enter value for web: wordpress

Enter value for graphical: acrobat

Enter value for computerskills: spreadsheets

old 1: insert into technicalskills

values('&programming\_skills','&web','&graphical','&computerskills')

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

```
new 1: insert into technicalskills  
values('java','wordpress','acrobat','spreadsheets')
```

1 row created.

```
SQL> insert into students  
values('&sid','&sname','&dob','&email','&year','&branch');
```

Enter value for sid: 61

Enter value for sname: Abhiraj.D

Enter value for dob: 14-JAN-2001

Enter value for email: abhiraj13@gmail.com

Enter value for year: 2

Enter value for branch: it

```
old 1: insert into students  
values('&sid','&sname','&dob','&email','&year','&branch')
```

```
new 1: insert into students values('61','Abhiraj.D','14-JAN-  
2001','abhiraj13@gmail.com',2,'it')
```

1 row created.

```
SQL> /
```

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

Enter value for sid: 62

Enter value for sname: ajay.B

Enter value for dob: 13-NOV-2000

Enter value for email: ajaybabu@gmail.com

Enter value for year: 2

Enter value for branch: it

old 1: insert into students

values('&sid','&sname','&dob','&email','&year','&branch')

new 1: insert into students values('62','ajay.B','13-NOV-2000','ajaybabu@gmail.com',2,'it')

1 row created.

SQL> /

Enter value for sid: 70

Enter value for sname: sam

Enter value for dob: 01-FEB-2001

Enter value for email: sam007@gmail.com

Enter value for year: 2

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

Enter value for branch: CSE

old 1: insert into students

values('&sid','&sname','&dob','&email','&year','&branch')

new 1: insert into students values('70','sam','01-FEB-2001','sam007@gmail.com',2,'CSE')

1 row created.

SQL> /

Enter value for sid: 311

Enter value for sname: irfan

Enter value for dob: 12-DEC-1999

Enter value for email: irfan@gmail.com

Enter value for year: 3

Enter value for branch: MECH

old 1: insert into students

values('&sid','&sname','&dob','&email','&year','&branch')

new 1: insert into students values('311','irfan','12-DEC-1999','irfan@gmail.com',3,'MECH')

1 row created.

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

SQL> /

Enter value for sid: 100

Enter value for sname: virat

Enter value for dob: 05-NOV-1984

Enter value for email: rcb@gmail.com

Enter value for year: 4

Enter value for branch: Civil

old 1: insert into students

values('&sid','&sname','&dob','&email','&year','&branch')

new 1: insert into students values('100','virat','05-NOV-1984','rcb@gmail.com',4,'Civil')

1 row created.

SQL> insert into courses values('&cid','&cname','&duration','&sid');

SQL> /

Enter value for cid: 1

Enter value for cname: java

Enter value for duration: 8weeks

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

Enter value for sid: 61

old 1: insert into courses values('&cid','&cname','&duration','&sid')

new 1: insert into courses values('1','java','8weeks','61')

1 row created.

SQL> /

Enter value for cid: 2

Enter value for cname: sql

Enter value for duration: 4weeks

Enter value for sid: 62

old 1: insert into courses values('&cid','&cname','&duration','&sid')

new 1: insert into courses values('2','sql','4weeks','62')

1 row created.

SQL> /

Enter value for cid: 3

Enter value for cname: photoshop

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

Enter value for duration: 8weeks

Enter value for sid: 70

old 1: insert into courses values('&cid','&cname','&duration','&sid')

new 1: insert into courses values('3','photoshop','8weeks','70')

1 row created.

SQL> /

Enter value for cid: 4

Enter value for cname: html

Enter value for duration: 4weeks

Enter value for sid: 311

old 1: insert into courses values('&cid','&cname','&duration','&sid')

new 1: insert into courses values('4','html','4weeks','311')

1 row created.

SQL> /

Enter value for cid: 5



DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

Enter value for cname: spreadsheets

Enter value for duration: 4weeks

Enter value for sid: 100

old 1: insert into courses values('&cid','&cname','&duration','&sid')

new 1: insert into courses values('5','spreadsheets','4weeks','100')

1 row created.

SQL> insert into learnedby values('&since','&sid');

Enter value for since: 1-FEB-2019

Enter value for sid: 61

old 1: insert into learnedby values('&since','&sid')

new 1: insert into learnedby values('1-FEB-2019','61')

1 row created.

SQL> /

Enter value for since: 18-JUN-2019

Enter value for sid: 62

old 1: insert into learnedby values('&since','&sid')

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

new 1: insert into learnedby values('18-JUN-2019','62')

1 row created.

SQL> /

Enter value for since: 1-JAN-2020

Enter value for sid: 70

old 1: insert into learnedby values('&since','&sid')

new 1: insert into learnedby values('1-JAN-2020','70')

1 row created.

SQL> /

Enter value for since: 10-OCT-2019

Enter value for sid: 311

old 1: insert into learnedby values('&since','&sid')

new 1: insert into learnedby values('10-OCT-2019','311')

1 row created.

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

SQL> /

Enter value for since: 1-JAN-2020

Enter value for sid: 100

old 1: insert into learnedby values('&since','&sid')

new 1: insert into learnedby values('1-JAN-2020','100')

1 row created.

SQL> insert into certified\_in values('&passedon','&sid');

Enter value for passedon: 12-APR-2019

Enter value for sid: 61

old 1: insert into certified\_in values('&passedon','&sid')

new 1: insert into certified\_in values('12-APR-2019','61')

1 row created.

SQL> /

Enter value for passedon: 19-AUG-2019

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

Enter value for sid: 62

old 1: insert into certified\_in values('&passedon','&sid')

new 1: insert into certified\_in values('19-AUG-2019','62')

1 row created.

SQL> /

Enter value for passedon: 01-MAR-2020

Enter value for sid: 70

old 1: insert into certified\_in values('&passedon','&sid')

new 1: insert into certified\_in values('01-MAR-2020','70')

1 row created.

SQL> /

Enter value for passedon: 30-NOV-2019

Enter value for sid: 311

old 1: insert into certified\_in values('&passedon','&sid')

new 1: insert into certified\_in values('30-NOV-2019','311')

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

1 row created.

SQL> /

Enter value for passedon: 13-FEB-2020

Enter value for sid: 100

old 1: insert into certified\_in values('&passedon','&sid')

new 1: insert into certified\_in values('13-FEB-2020','100')

1 row created.

SQL> select \*from courses;

CID	CNAME	DURATI	SID
1	java	8weeks	61
2	sql	4weeks	62
3	photoshop	8weeks	70
4	html	4weeks	311

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

5            spreadsheets            4weeks 100

SQL> select \*from students;

SID	SNAME	DOB
-----	-------	-----

-----

EMAIL
-------

-----

YEAR	BRANCH
------	--------

-----

61	Abhiraj.D	14-JAN-01
----	-----------	-----------

abhiraj13@gmail.com

2 it

62	ajay.B	13-NOV-00
----	--------	-----------

ajaybabu@gmail.com

2 it

SID	SNAME	DOB
-----	-------	-----

-----

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

EMAIL

-----

YEAR BRANCH

-----

70          sam          01-FEB-01

sam007@gmail.com

2 CSE

311          irfan          12-DEC-99

irfan@gmail.com

SID          SNAME          DOB

-----

EMAIL

-----

YEAR BRANCH

-----

3 MECH

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

100          virat          05-NOV-84  
rcb@gmail.com  
4 Civil

SQL> select \*from technicalskills;

PROGRAMMING_SKILLS	WEB	GRAPHICAL
--------------------	-----	-----------

-----  
COMPUTERSKILLS  
-----

sql	html	photoshop
msoffice		

c	java script	free hand
powerpoint		

java	wordpress	acrobat
spreadsheets		



DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---

SQL> select \*from learnedby;

SINCE    SID

-----

01-FEB-19 61

18-JUN-19 62

01-JAN-20 70

10-OCT-19 311

01-JAN-20 100

SQL> select \*from certified\_in;

PASSEDON    SID

-----

12-APR-19 61

19-AUG-19 62

01-MAR-20 70

30-NOV-19 311

13-FEB-20 100

DBMS ASSIGNMENT -1  
TITLE: TECHNICAL SKILLS DATA RETRIEVAL SYSTEM

---