

--**Task 1** 'Show the Full Name of the Job Seeker, Job title that he/she Applied for, and the name of the company. For only who applied on the job '

```
select JS.FullName, J.Title, C.Name from Applications A, JobSeekers JS, Jobs J, Companies C where A.SeekerID = JS.SeekerID AND A.JobID = J.JobID AND J.CompanyID = C.CompanyID
```

	FullName	Title	Name
1	Sara Al Busaidi	Software Developer	TechWave
2	Hassan Al Lawati	Data Analyst	TechWave
3	Mona Al Zadjali	Science Teacher	EduBridge
4	Ahmed Al Hinai	Field Engineer	GreenEnergy

--**Task 2** 'Show the title and the company name even if no one has applied '

```
select Jobs.Title, Companies.Name from Jobs, Companies, Applications where Jobs.JobID = Applications.JobID AND Jobs.CompanyID = Companies.CompanyID
```

	Title	Name
1	Software Developer	TechWave
2	Data Analyst	TechWave
3	Science Teacher	EduBridge
4	Field Engineer	GreenEnergy

--**Task 3** 'Show seeker name, job title, and city where both live and job match'

```
Select JobSeekers.FullName, Jobs.Title, JobSeekers.City from JobSeekers JOIN Applications ON JobSeekers.SeekerID = Applications.SeekerID JOIN Jobs ON Applications.JobID = Jobs.JobID WHERE JobSeekers.City = Jobs.Location;
```

	FullName	Title	City
1	Sara Al Busaidi	Software Developer	Muscat
2	Hassan Al Lawati	Data Analyst	Muscat
3	Mona Al Zadjali	Science Teacher	Salalah

-- **Task 4** 'Show all job seekers and any jobs they've applied to (if any). -- Use LEFT JOIN to include seekers who never applied'

```
select JobSeekers.FullName, Jobs.Title, Applications.Status from JobSeekers LEFT JOIN Applications ON JobSeekers.SeekerID = Applications.SeekerID LEFT JOIN Jobs ON Applications.JobID = Jobs.JobID;
```

	FullName	Title	Status
1	Sara Al Busaidi	Software Developer	Pending
2	Ahmed Al Hinai	Field Engineer	Pending
3	Mona Al Zadjali	Science Teacher	Rejected
4	Hassan Al Lawati	Data Analyst	Shortlisted

-- **Task 5** 'Show each job and the names of applicants (if any). -- Show all jobs even if no one applied'

```
Select Jobs.Title, JobSeekers.FullName from Jobs LEFT JOIN Applications ON Jobs.JobID = Applications.JobID LEFT JOIN JobSeekers ON Applications.SeekerID = JobSeekers.SeekerID;
```

	Title	FullName
1	Software Developer	Sara Al Busaidi
2	Data Analyst	Hassan Al Lawati
3	Science Teacher	Mona Al Zadjali
4	Field Engineer	Ahmed Al Hinai

--**Task 6** 'Show all jobs even if no one applied'

```
select Jobs.Title, JobSeekers.FullName from Jobs LEFT JOIN Applications ON Jobs.JobID = Applications.JobID LEFT JOIN JobSeekers ON Applications.SeekerID = JobSeekers.SeekerID;
```

	Title	FullName
1	Software Developer	Sara Al Busaidi
2	Data Analyst	Hassan Al Lawati
3	Science Teacher	Mona Al Zadjali
4	Field Engineer	Ahmed Al Hinai

-- **Task 7** 'Show companies that have no jobs posted. -- Use LEFT JOIN from Companies to Jobs and filter jobs as NULL'

```
select Companies.Name, Companies.City from Companies LEFT JOIN Jobs ON
Companies.CompanyID = Jobs.CompanyID where Jobs.JobID IS NULL;
```

Name	City

-- **Task 8** 'Show pairs of job seekers who live in the same city but are not the same person.'

```
select A.FullName as Seeker1, B.FullName as Seeker2, A.City from JobSeekers A,
JobSeekers B where A.City = B.City AND A.SeekerID <> B.SeekerID;
```

	Seeker1	Seeker2	City
1	Sara Al Busaidi	Hassan Al Lawati	Muscat
2	Hassan Al Lawati	Sara Al Busaidi	Muscat

-- **Task 9** Seekers who applied to high-salary jobs not in their city.

```
select JobSeekers.FullName, Jobs.Title, JobSeekers.City as SeekerCity, Jobs.Location as
JobCity, Jobs.Salary from JobSeekers JOIN Applications on JobSeekers.SeekerID =
Applications.SeekerID JOIN Jobs on Applications.JobID = Jobs.JobID where Jobs.Salary >
850 AND JobSeekers.City <> Jobs.Location;
```

	FullName	Title	SeekerCity	JobCity	Salary
1	Ahmed Al Hinai	Field Engineer	Nizwa	Sohar	950.00

-- **Task 10** 'Show all seekers and job cities they applied to, even if they don't match.'

```
select JobSeekers.FullName, JobSeekers.City as SeekerCity, Jobs.Location as JobCity from
JobSeekers JOIN Applications on JobSeekers.SeekerID = Applications.SeekerID JOIN Jobs
on Applications.JobID = Jobs.JobID;
```

	FullName	SeekerCity	JobCity
1	Sara Al Busaidi	Muscat	Muscat
2	Hassan Al Lawati	Muscat	Muscat
3	Mona Al Zadjali	Salalah	Salalah
4	Ahmed Al Hinai	Nizwa	Sohar

-- **Task 11** Show jobs that haven't received any applications.

`select Jobs.Title from Jobs LEFT JOIN Applications on Jobs.JobID = Applications.JobID
where Applications.AppID IS NULL;`

Title

-- **Task 12** Seekers who applied to jobs in the same city they live in.

`select JobSeekers.FullName, Jobs.Title, JobSeekers.City from JobSeekers JOIN
Applications on JobSeekers.SeekerID = Applications.SeekerID JOIN Jobs on
Applications.JobID = Jobs.JobID where JobSeekers.City = Jobs.Location;`

	FullName	Title	City
1	Sara Al Busaidi	Software Developer	Muscat
2	Hassan Al Lawati	Data Analyst	Muscat
3	Mona Al Zadjali	Science Teacher	Salalah

-- **Task 13** Pairs of seekers in same city who applied to different jobs.

`select A.FullName as Seeker1, B.FullName as Seeker2, A.City from JobSeekers A JOIN
Applications AppA on A.SeekerID = AppA.SeekerID JOIN Jobs J1 on AppA.JobID = J1.JobID
JOIN JobSeekers B on A.City = B.City AND A.SeekerID <> B.SeekerID JOIN Applications
AppB on B.SeekerID = AppB.SeekerID JOIN Jobs J2 on AppB.JobID = J2.JobID where
J1.JobID <> J2.JobID;`

	Seeker1	Seeker2	City
1	Sara Al Busaidi	Hassan Al Lawati	Muscat
2	Hassan Al Lawati	Sara Al Busaidi	Muscat

-- **Task 14** Show applications where seeker is from a different city than the job.

```
select JobSeekers.FullName, Jobs.Title, JobSeekers.City as SeekerCity, Jobs.Location as  
JobCity from JobSeekers JOIN Applications on JobSeekers.SeekerID =  
Applications.SeekerID JOIN Jobs on Applications.JobID = Jobs.JobID where  
JobSeekers.City <> Jobs.Location;
```

	FullName	Title	SeekerCity	JobCity
1	Ahmed Al Hinai	Field Engineer	Nizwa	Sohar

-- **Task 15** Show cities where job seekers live but no company is based.

```
select DISTINCT JobSeekers.City from JobSeekers LEFT JOIN Companies on  
JobSeekers.City = Companies.City where
```

```
Companies.CompanyID IS NULL;
```

	City
1	Nizwa