# PROJECT SQL 1

To get the informations needed it for this analysis, I'll first create a table view from the main table HRData
In a case of multiple tables query. I would perform a join strategy to create a view as follow below:
Let's first DROP the create view to use the same view name.

```
DROP VIEW R_of_Leaving;;
```

```
CREATE VIEW R_of_Leaving AS
select Employee_Name, Gender , Salary, DOB, [Position],
Dateofhire, RaceDesc, MaritalDesc, DateofTermination, TermReason, Performance
Score , Absences from Empl_details ed
LEFT join empl_names en ON ed.EmpID = en.EmpID
LEFT JOIN Departments d on en.EmpID = d.EmpID;
```

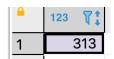
## Success!

## SELECT \* from R\_of\_Leaving;

	ABC Employee Name 1:	AB T	123 Sal <b>T</b> ‡	ABC DOB TI	RBC Position T1	ABC Dateo T:	RBC RaceDe T:	ABC Marita T:	RBC Dateof T:	ABC TermReason T:	RBC Perform T:	123 Absen
1	Adinolfi, Wilson K	М	62,506	07/10/83	Production Technician I	7/5/2011	White	Single		N/A-StillEmployed	Exceeds	1
2	Ait Sidi, Karthikeyan	М	104,437	05/05/75	Sr. DBA	3/30/2015	White	Married	6/16/2016	career change	Fully Meets	17
3	Akinkuolie, Sarah	F	64,955	09/19/88	Production Technician II	7/5/2011	White	Married	9/24/2012	hours	Fully Meets	3
4	Alagbe,Trina	F	64,991	09/27/88	Production Technician I	1/7/2008	White	Married		N/A-StillEmployed	Fully Meets	15
5	Anderson, Carol	F	50,825	09/08/89	Production Technician I	7/11/2011	White	Divorced	9/6/2016	return to school	Fully Meets	2
6	Anderson, Linda	F	57,568	05/22/77	Production Technician I	1/9/2012	White	Single		N/A-StillEmployed	Exceeds	15
7	Andreola, Colby	F	95,660	05/24/79	Software Engineer	11/10/2014	White	Single		N/A-StillEmployed	Fully Meets	19
8	Athwal, Sam	М	59,365	02/18/83	Production Technician I	9/30/2013	White	Widowed		N/A-StillEmployed	Fully Meets	19
9	Bachiochi, Linda	F	47,837	02/11/70	Production Technician I	7/6/2009	Black or Africa	Single		N/A-StillEmployed	Fully Meets	4
10	Bacong, Alejandro	М	50,178	01/07/88	IT Support	1/5/2015	White	Divorced		N/A-StillEmployed	Fully Meets	16
11	Baczenski, Rachael	F	54,670	01/12/74	Production Technician I	1/10/2011	Black or Africa	Married	1/12/2017	Another position	Fully Meets	12
12	Barbara, Thomas	М	47,211	02/21/74	Production Technician I	4/2/2012	Black or Africa	Married	9/19/2016	unhappy	Fully Meets	15
13	Barbossa, Hector	М	92.328	07/04/88	Data Analyst	11/10/2014	Black or Africa	Divorced		N/A-StillEmployed	Exceeds	9

Getting rid of all duplicates and checking whether we haven't lost any data.

## SELECT DISTINCT(count(\*)) from R\_of\_Leaving rol



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## 1 - Question

How many employee have left the company?

SELECT count(\*) from R\_of\_Leaving
WHERE dateoftermination != '';



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#### 2 - Question

What was their main reason of leaving the company?

SELECT COUNT(TermReason) as
Num\_of\_employee,TermReason FROM
R\_of\_Leaving
WHERE TermReason != 'N/AStillEmployed'
group by TermReason
ORDER By Num\_of\_employee DESC;

<u> </u>	123 Num_of_employee	7:	RBC TermReason 71
1		20	Another position
2		14	unhappy
3		11	more money
4		9	career change
5		8	hours
6		7	attendance
7		5	relocation out of area
8		5	return to school
9		4	military
10		4	retiring
11		4	no-call, no-show
12		4	performance
13		3	maternity leave - did not return
14		3	medical issues
15		1	Learned that he is a gangster
16		1	Fatal attraction
17		1	gross misconduct

By exploring the 104 Reason of Terminations, 20 have left for a **better** position or **paid** elsewhere which is common BUT 14 have left "Unhappy". Let's get to know more about those 14.

#### **SELECT**

Employee\_Name,Gender ,Salary FROM
R\_of\_Leaving
WHERE TermReason = 'unhappy';

	RBC Employee_Name (7)	RBC Gender T:	123 Salary 🟋
1	Barbara, Thomas	М	47,211
2	Cloninger, Jennifer	F	64,066
3	DeGweck, James	М	55,722
4	Huynh, Ming	F	68,182
5	Immediato, Walter	М	83,082
6	Jung, Judy	F	61,154
7	Linares, Marilyn	F	52,624
8	Miller, Ned	M	55,800
9	Oliver, Brooke	F	71,966
10	Pelletier, Ermine	F	60,270
11	Purinton, Janine	F	46,430
12	Squatrito, Kristen	F	62,425
13	Trzeciak, Cybil	F	74,813
14	Wilber, Barry	М	55,140

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#### 3 - Questions

How long they worked for?

How was their PerformanceScore and at what age they've left?

SELECT Employee\_name, [POSITION] ,Salary, PerformanceScore,Absences
,DATEDIFF(YEAR , dateofhire, dateoftermination) AS Years\_Employed
,DATEDIFF(YEAR,DOB,dateoftermination) AS Age
from R\_of\_Leaving
WHERE TermReason = 'unhappy'
ORDER by salary DESC;

	RBC Employee_name	ABC POSITION T:	123 Salary 🏋:	RBC PerformanceScore T	123 Absences T:	123 Years_Employed T	123 Age <b>\(\frac{1}{4}\)</b>
1	Immediato, Walter	Production Manager	83,082	Needs Improvement	4		1 36
2	Trzeciak, Cybil	Production Technician II	74,813	Fully Meets	5	3	3 29
3	Oliver, Brooke	Production Technician II	71,966	Fully Meets	17		1 61
4	Huynh, Ming	Production Technician II	68,182	Fully Meets	18		2 37
5	Cloninger, Jennifer	Production Technician II	64,066	Fully Meets	9	:	2 32
6	Squatrito, Kristen	Production Technician I	62,425	Exceeds	16	:	2 42
7	Jung, Judy	Production Technician I	61,154	Fully Meets	4		5 30
8	Pelletier, Ermine	Production Technician II	60,270	Needs Improvement	2	4	1 26
9	Miller, Ned	Production Technician II	55,800	PIP	6	3	3 29
10	DeGweck, James	Production Technician I	55,722	Fully Meets	14		5 39
11	Wilber, Barry	Production Technician I	55,140	Fully Meets	7		1 50
12	Linares, Marilyn	Production Technician I	52,624	Fully Meets	16		7 37
13	Barbara, Thomas	Production Technician I	47,211	Fully Meets	15		42
14	Purinton, Janine	Production Technician I	46,430	Fully Meets	16		1 43

Let'd get rid of those who didn't meet their PerformanceScore.

```
SELECT Employee_name, [POSITION] ,Salary, PerformanceScore,Absences
,DATEDIFF(YEAR , dateofhire, dateoftermination) AS Years_Employed
,DATEDIFF(YEAR,DOB,dateoftermination) AS Age
from R_of_Leaving
WHERE TermReason = 'unhappy'
and PerformanceScore = 'Fully Meets'
ORDER by salary DESC;
```

	RBC Employee_name	ABC POSITION T:	123 Salary 🏋 🕻	ABC PerformanceScore	123 Absences	₹‡ 123 Y	ears_Employed	7:	123 Age	T:
1	Trzeciak, Cybil	Production Technician II	74,813	Fully Meets		5		3		29
2	Oliver, Brooke	Production Technician II	71,966	Fully Meets		17		1		61
3	Huynh, Ming	Production Technician II	68,182	Fully Meets		18		2		37
4	Cloninger, Jennifer	Production Technician II	64,066	Fully Meets		9		2		32
5	Jung, Judy	Production Technician I	61,154	Fully Meets		4		5		30
6	DeGweck, James	Production Technician I	55,722	Fully Meets		14		5		39
7	Wilber, Barry	Production Technician I	55,140	Fully Meets		7		4		50
8	Linares, Marilyn	Production Technician I	52,624	Fully Meets		16		7		37
9	Barbara, Thomas	Production Technician I	47,211	Fully Meets		15		4		42
10	Purinton, Janine	Production Technician I	46,430	Fully Meets		16		1		43

Let's look at those whose salary above 60.000.

```
SELECT Employee_name, [POSITION] , Salary, PerformanceScore, Absences
, DATEDIFF(YEAR , dateofhire, dateoftermination) AS Years_Employed
, DATEDIFF(YEAR, DOB, dateoftermination) AS Age
from R_of_Leaving
WHERE TermReason = 'unhappy'
and PerformanceScore = 'Fully Meets'
and Salary > 60000
ORDER by salary DESC;
```

	RBC Employee_name	ABC POSITION T:	123 Salary 🟋	RBC PerformanceScore T:	123 Absences T‡	123 Years_Employed T:	123 Age 📆
1	Trzeciak, Cybil	Production Technician II	74,813	Fully Meets	5	3	29
2	Oliver, Brooke	Production Technician II	71,966	Fully Meets	17	1	61
3	Huynh, Ming	Production Technician II	68,182	Fully Meets	18	2	37
4	Cloninger, Jennifer	Production Technician II	64,066	Fully Meets	9	2	32
5	Jung, Judy	Production Technician I	61,154	Fully Meets	4	5	30

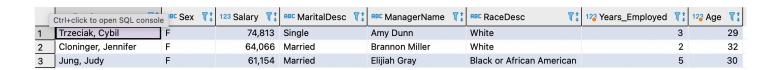
Let's narrow more the data by those with less Absences.

```
SELECT Employee_name, [POSITION] ,Salary, PerformanceScore,Absences
,DATEDIFF(YEAR , dateofhire, dateoftermination) AS Years_Employed
,DATEDIFF(YEAR,DOB,dateoftermination) AS Age
from R_of_Leaving
WHERE TermReason = 'unhappy'
and PerformanceScore = 'Fully Meets'
and Salary > 60000
and Absences < 10
ORDER by salary DESC;</pre>
```

	RBC Employee_name	ABC POSITION T:	123 Salary Ҭ 🗜	RBC PerformanceScore T:	123 Absences T:	123 Years_Employed T	123 Age 📆
1	Trzeciak, Cybil	Production Technician II	74,813	Fully Meets	5	3	29
2	Cloninger, Jennifer	Production Technician II	64,066	Fully Meets	9		32
3	Jung, Judy	Production Technician I	61,154	Fully Meets	4		30

After narrowing my result, only 3 employees found unhappy but have worked longer with lesser absences and high salary.Lets get to know more and dig a bit deeper about these 3.

```
SELECT Employee_name, Sex, Salary , MaritalDesc ,ManagerName ,RaceDesc
,DATEDIFF(YEAR , dateofhire, dateoftermination) AS Years_Employed
,DATEDIFF(YEAR,DOB,dateoftermination) AS Age
from HRData h
WHERE TermReason = 'unhappy'
and PerformanceScore = 'Fully Meets'
and Salary > 60000
and Absences < 10
ORDER by salary DESC;</pre>
```



## **Conclusion:**

There are many reason you can leave a job with an average salary of 69.000 but been "unhappy" should treated it seriously.

On my finding out of the 104 employees have left for a various reason. There were 14 who left 'unhappy', out of those 14, 3 were high paid female, fully meet their PerformanceScore, worked 10 years between them and aged between 29–32 with 18 days of Absences between them during their period of employment.

If I was part of this hr company, I would have contacted them to get more information then discuss with their reporting manager to avoid such a loss.