

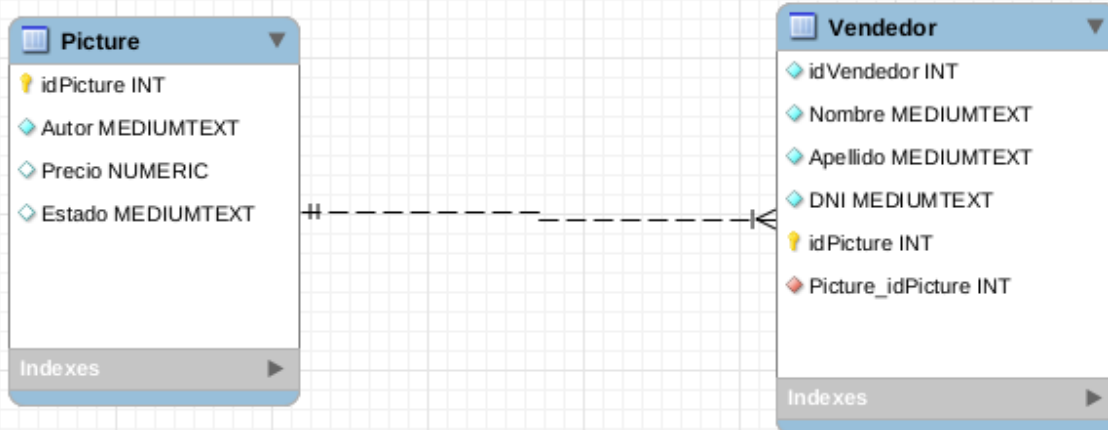
EXERCICIS MODELATGE I QUERIES SQL

MODELATGE BBDD

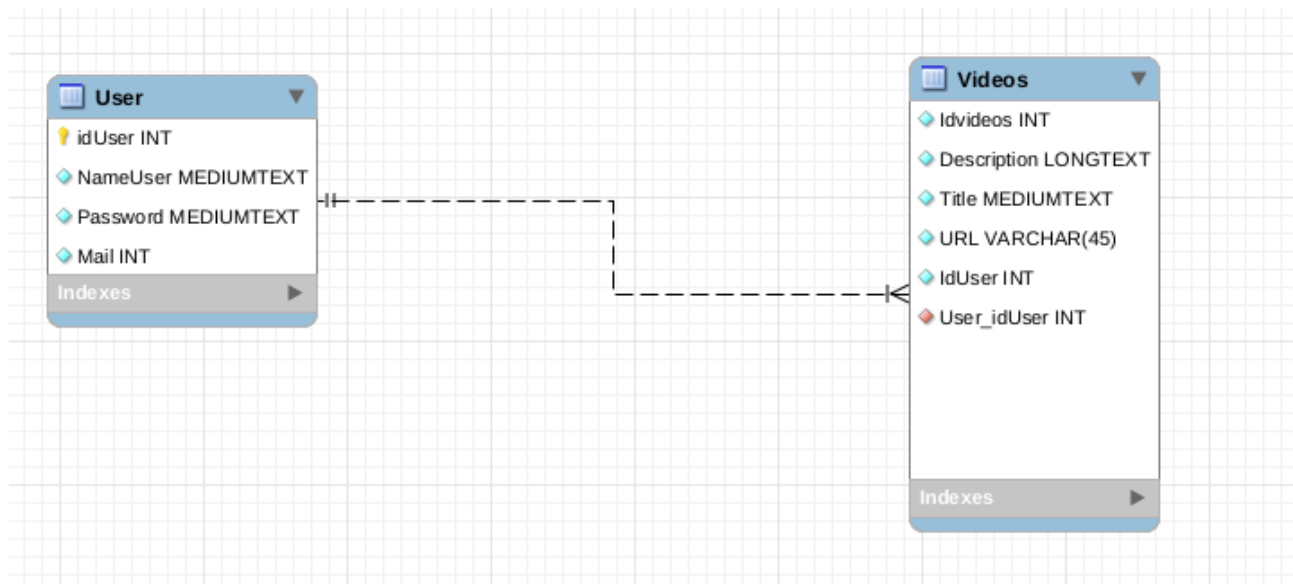
1.



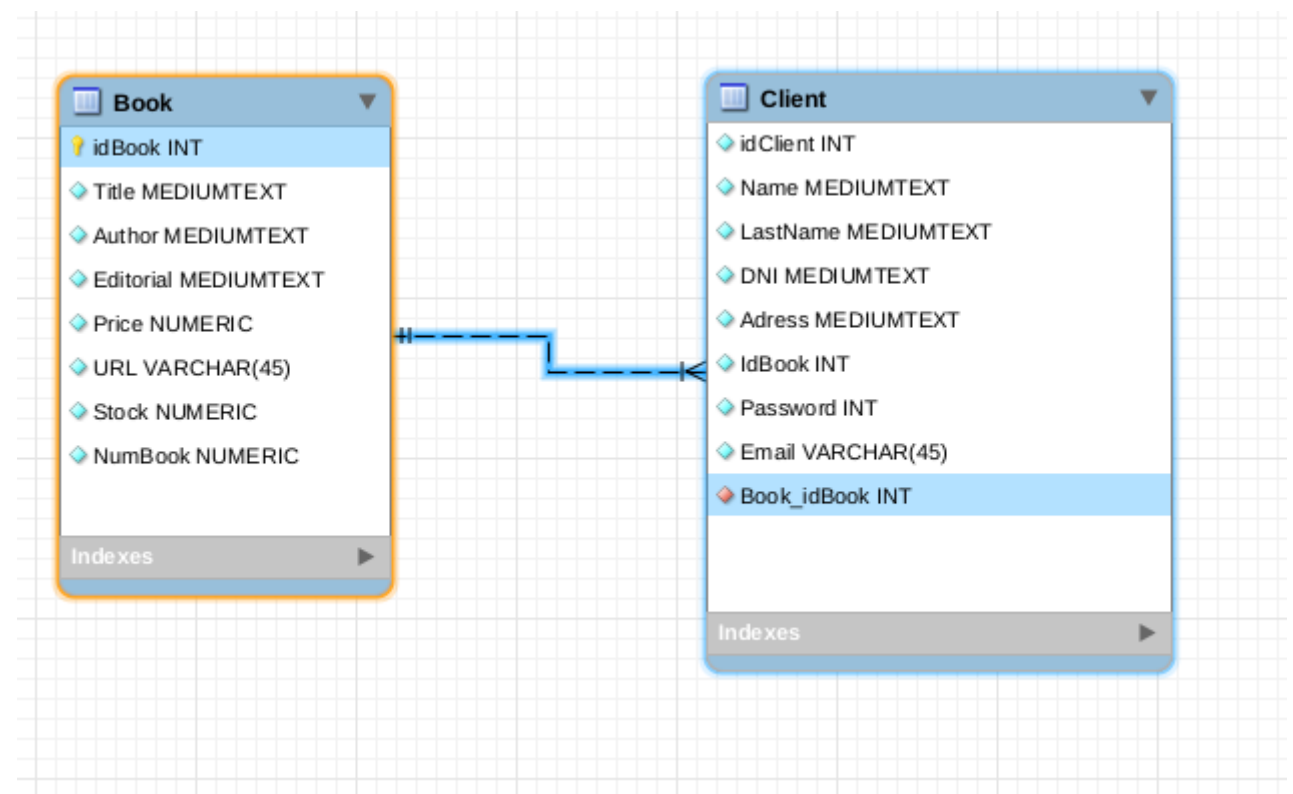
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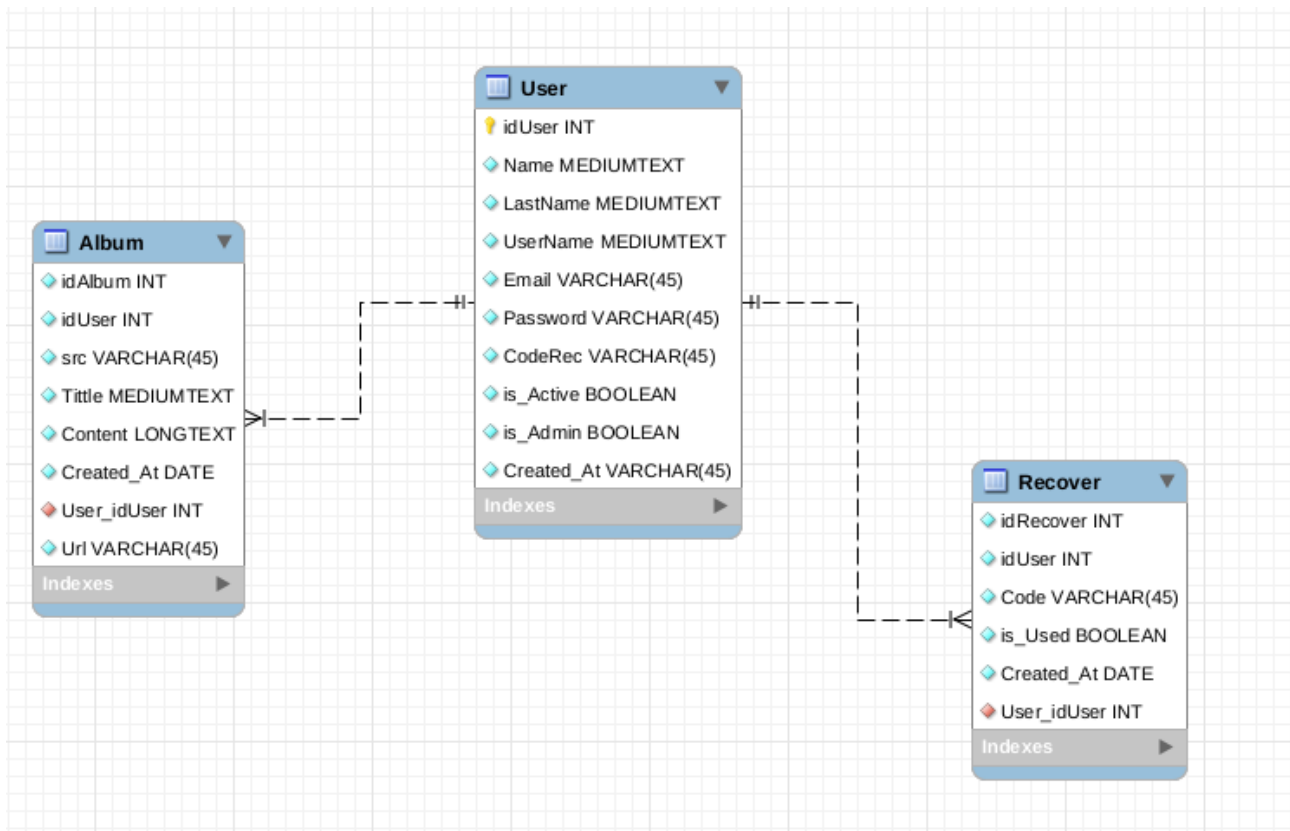
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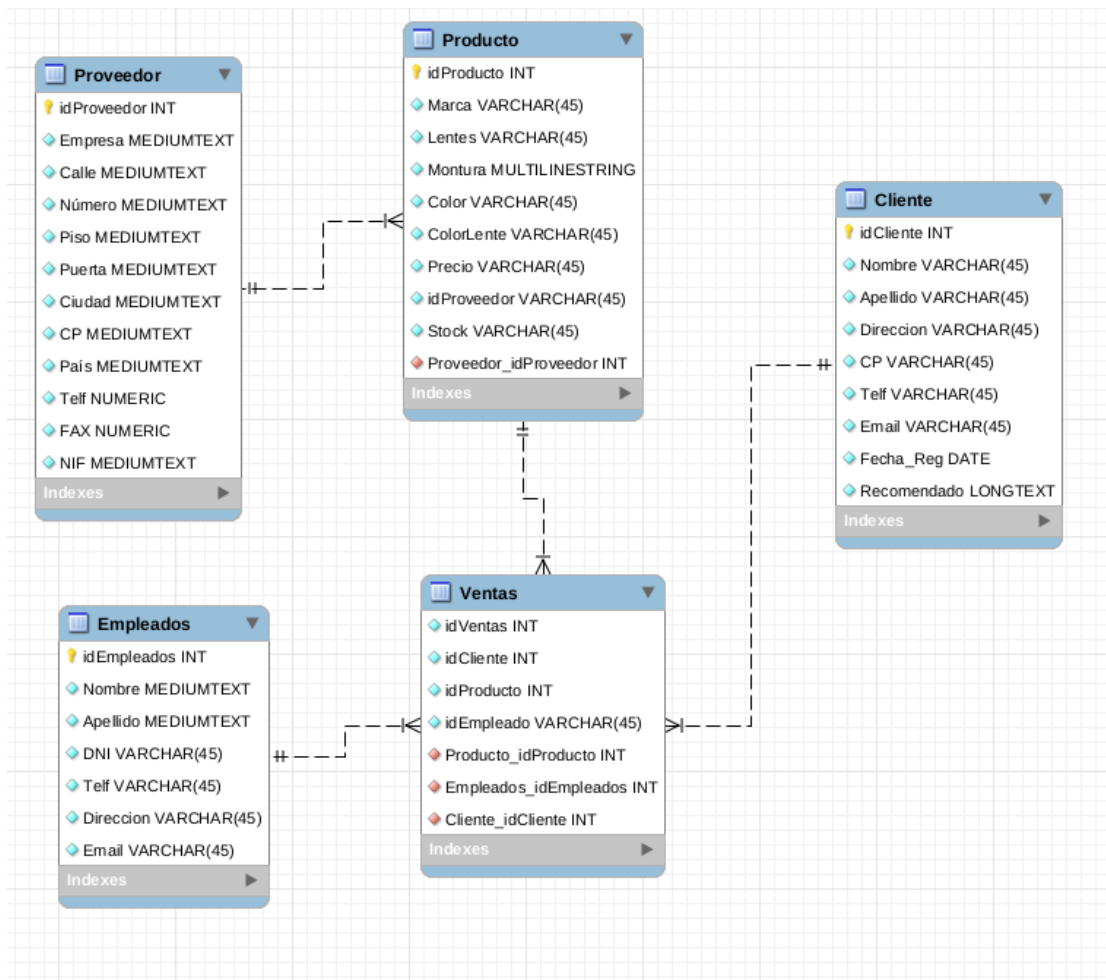
4.



5.



6.



QUERIES SQL

1.

```
SELECT COUNT(flightID) As Total  
FROM Flights;
```

1	4758	
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2.

```
SELECT Origin, AVG (ArrDelay) AS prom_arribades, AVG (DepDelay) AS prom_sortides  
FROM Flights  
GROUP BY Origin;
```

#	Origin	prom_arribades	prom_sortides	
1	ABE	17.1250	15.7500	
2	ABQ	3.8158	6.8684	
3	ABY	4.5000	19.0000	
4	AGS	19.0000	15.3333	
5	ALB	-2.2500	-0.1250	
6	AMA	1.2500	0.0000	
7	ANC	1.8571	3.5000	
8	ASE	7.0000	10.0000	
9	ATL	9.5720	9.8833	
10	ATW	0.6667	1.6667	
11	AUS	1.5455	1.2273	

3.

```
SELECT Origin, colYear, colMonth, AVG (ArrDelay) AS prom_arribades  
FROM Flights  
GROUP BY Origin, colYear, colMonth  
ORDER BY Origin , colYear, colMonth;
```

#	Origin	colYear	colMonth	prom_arribades	
1	ABE	1988	5	73.0000	
2	ABE	1988	11	26.0000	
3	ABE	1990	1	-4.0000	
4	ABE	1990	12	-5.0000	
5	ABE	1991	7	10.0000	
6	ABE	1992	6	-5.0000	
7	ABE	2005	1	-18.0000	
8	ABE	2006	1	60.0000	
9	ABQ	1987	10	10.0000	
10	ABQ	1989	1	7.0000	

4.

```
SELECT USAirports.City, colYear,colMonth, AVG (ArrDelay) AS prom_arribades
FROM USAirports RIGHT JOIN Flights ON USAirports.IATA = Flights.Origin
GROUP BY USAirports.City, colYear,colMonth
ORDER BY USAirports.City;
```

#	City	colYear	colMonth	prom_arribades	
1	Albany	1988	3	-6.0000	
2	Albany	1992	12	-18.0000	
3	Albany	1993	10	0.0000	
4	Albany	1994	10	-11.0000	
5	Albany	2003	3	-4.0000	
6	Albany	2004	10	1.0000	
7	Albany	2006	1	-8.0000	
8	Albany	2006	3	17.0000	
9	Albany	2007	6	5.0000	
10	Albany	2008	12	15.0000	
11	Albuquerque	1987	10	10.0000	
12	Albuquerque	1989	1	7.0000	
13	Albuquerque	1990	4	-3.0000	
14	Albuquerque	1991	1	6.0000	
15	Albuquerque	1993	11	3.0000	
16	Albuquerque	1994	1	12.0000	
17	Albuquerque	1995	1	-8.0000	
18	Albuquerque	1995	7	-1.0000	
19	Albuquerque	1995	8	7.0000	
20	Albuquerque	1995	9	-2.0000	
21	Albuquerque	1996	1	-1.0000	
22	Albuquerque	1996	7	0.0000	
23	Albuquerque	1997	9	-8.0000	
24	Albuquerque	1997	10	12.0000	

5.

```
SELECT UniqueCarrier, colYear, colMonth, AVG (ArrDELAY) AS avg_delay, SUM(Cancelled)
AS total_cancelled
FROM Flights
GROUP BY colYear, colMonth
ORDER BY total_cancelled desc;
```

#	UniqueCarrier	colYear	colMonth	avg_delay	total_cancelled	
1	AA	1988	1	29.5294	3	
2	EA	1989	5	6.0000	1	
3	WN	1990	8	-1.5000	1	
4	TW	1988	9	-0.1765	1	
5	DL	1989	8	7.2353	1	
6	US	1990	2	5.0769	1	
7	UA	1987	11	7.2941	1	
8	UA	1988	2	2.0625	1	
9	HP	1987	12	16.8333	1	
10	PI	1988	4	1.7059	1	
11	CO	1990	5	12.0556	1	
12	UA	1989	2	12.6250	1	
13	PI	1988	7	8.1667	1	
14	NW	2000	5	15.2632	0	
15	TW	1988	11	1.0625	0	

6.

```

SELECT TailNum, SUM(Distance) AS totalDistance
FROM Flights
WHERE TailNum > "1"
GROUP BY TailNum
ORDER BY totalDistance desc;

```

#	TailNum	totalDistance	
1	N543UA	7675	
2	N12238	6829	
3	N580JB	6277	
4	N5DCAA	5300	
5	N637DL	5223	
6	N5DJAA	5046	
7	N653UA	5005	
8	N614UA	4950	
9	N615DL	4948	
10	N128DL	4584	
11	N648AW	4435	
12	N601DL	4307	
13	N669AW	4299	
14	N559UA	4235	
15	N555UA	4214	

7.

```
SELECT UniqueCarrier, AVG (ArrDelay) AS avgDelay
FROM Flights
WHERE ArrDelay > "10"
GROUP BY UniqueCarrier
ORDER BY ArrDelay;
```

#	UniqueCarrier	avgDelay	
1	NW	44.4881	
2	AQ	12.0000	
3	PI	37.3750	
4	PS	13.0000	
5	PA (1)	23.5714	
6	9E	68.6667	
7	TZ	71.7500	
8	EV	45.5000	
9	FL	54.6154	
10	MQ	53.9070	
11	OH	47.5000	
12	HP	46.0000	
13	WN	37.9854	
14	AA	44.7388	
15	U2	39.8369	