



CPSC-500 - 2

SQL Database

Assignment 1

Group -3

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Question 1

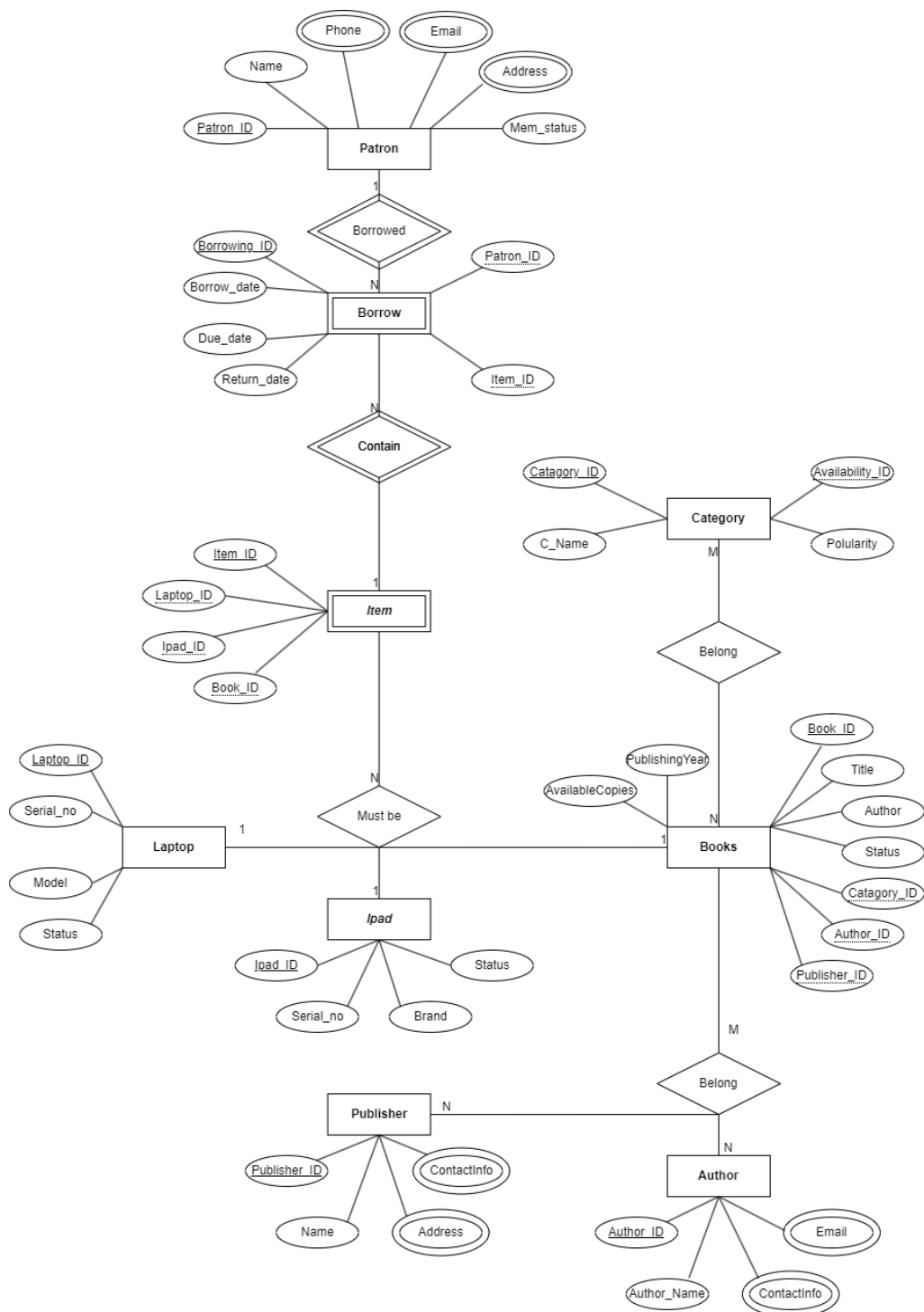
ER Diagram Chain Notation:



ER_Library_Chain_Notation.drawio



ER_Library_Chain_Notation.drawio.pdf



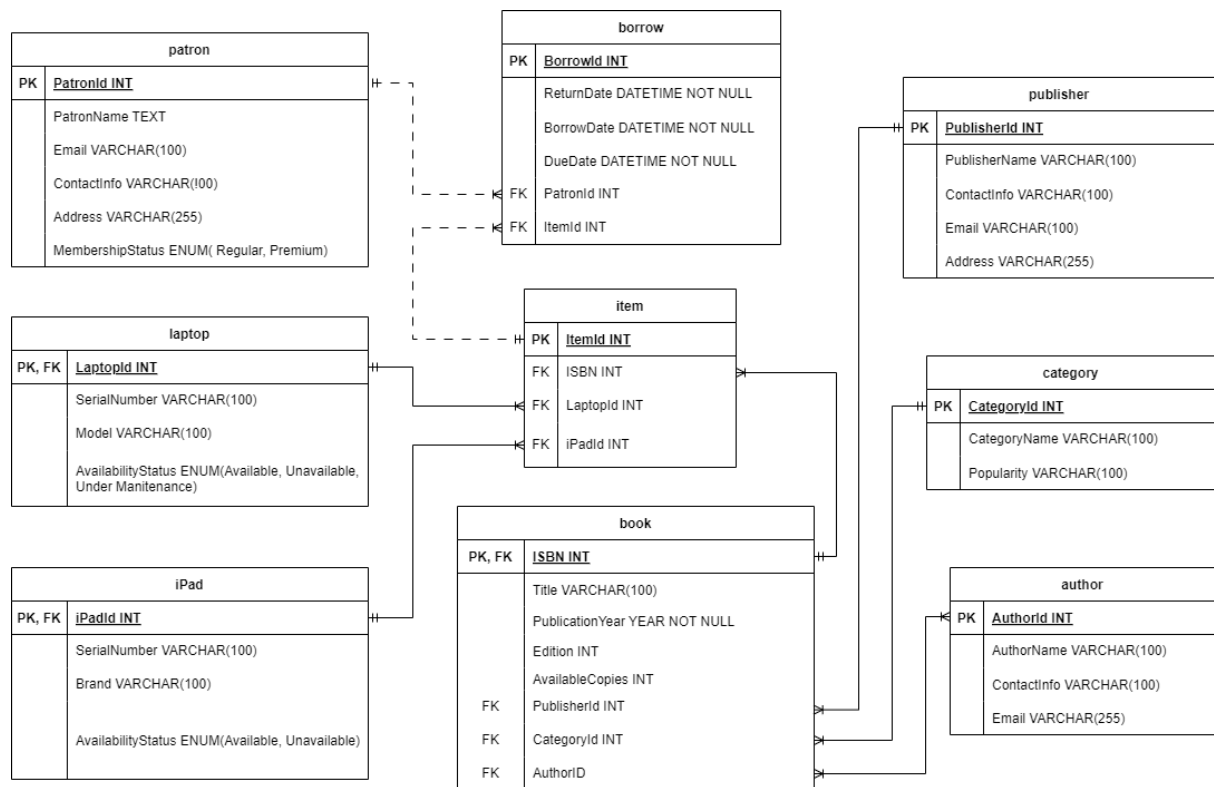
ER Diagram Crow Foot Notation:



ER_Library_Crow_Foot
.drawio



ER_library_crow_foot.
drawio.pdf






Question 2

A) Write a query using MySQL to return all countries included in the World database.



World_(A).sql

```
1  -- A) Write a query using MySQL to return all countries included in the World database.--
2
3  •  USE world;
4  •  SELECT
5      Name
6  FROM
7      world.country;
```

Result Grid |  Filter Rows: | Export:  Wrap Cell Content: 

Name
Aruba
Afghanistan
Angola
Anguilla
Albania
Andorra
Netherlands Antilles
United Arab Emirates
Argentina
Armenia
American Samoa
Antarctica
French Southern ter...
Antigua and Barbuda
Australia
Austria
Azerbaijan
Burundi
Belgium
Benin
Burkina Faso
Bangladesh
Bulgaria
Bahrain
Bahamas
Bosnia and Herzego...
Belarus

country 2 x

B) Write a query using MySQL that returns all countries in Europe.



World_(B).sql

```
1  -- B) Write a query using MySQL to return all countries Europe.--
2
3  •  USE world;
4  •  SELECT
5      Name, continent
6  FROM
7      world.country
8  WHERE
9      continent = 'Europe';
```

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	Name	continent			
▶	Albania	Europe			
	Andorra	Europe			
	Austria	Europe			
	Belgium	Europe			
	Bulgaria	Europe			
	Bosnia and Herzegovina	Europe			
	Belarus	Europe			
	Switzerland	Europe			
	Czech Republic	Europe			
	Germany	Europe			
	Denmark	Europe			
	Spain	Europe			
	Estonia	Europe			
	Finland	Europe			
	France	Europe			
	Faroe Islands	Europe			
	United Kingdom	Europe			
	Gibraltar	Europe			
	Greece	Europe			
	Croatia	Europe			
	Hungary	Europe			
	Ireland	Europe			
	Iceland	Europe			
	Italy	Europe			

country 2 x

- C) Write a query using MySQL to return all countries that speaks English as an official language with percentage greater than or equal to 70.



World_(C).sql

```
1  /* C) Write a query using MySQL to return all countries that
2     speaks English as an official language with percentage
3     greater than or equal to 70.*/
4
5  •  USE world;
6  •  SELECT
7      a.Name,
8      b.language,
9      b.IsOfficial,
10     b.percentage
11  FROM
12     world.country a
13  JOIN
14     world.countrylanguage b ON a.Code = b.CountryCode
15  WHERE
16     b.Language = 'English'
17  AND
18     b.IsOfficial = 'T'
19  AND
20     b.Percentage >= 70;
21
```





Result Grid				
Filter Rows: <input type="text"/> Export: Wrap Cell Content:				
	Name	language	IsOfficial	percentage
▶	Australia	English	T	81.2
	Bermuda	English	T	100.0
	United Kingdom	English	T	97.3
	Gibraltar	English	T	88.9
	Ireland	English	T	98.4
	New Zealand	English	T	87.0
	United States	English	T	86.2
	Virgin Islands, U.S.	English	T	81.7

- D) Write a query using MySQL to return all countries that received their independence in the 18th century.



World_(D).sql

```
1  /*D) Write a query using MySQL to return all countries
2     that received their independence in the 18th century.*/
3
4  •  USE world;
5  •  SELECT
6      Name, IndepYear
7  FROM
8      world.country
9  WHERE
10     IndepYear
11     BETWEEN
12     1700 AND 1799;
```

Result Grid			Filter Rows: <input type="text"/>	Export: 	Wrap Cell Content: 
	Name	IndepYear			
▶	Nepal	1769			
	United States	1776			

E) Write a query using MySQL that returns the following dataset.

Name	CountryCode	District
Delhi	IND	Delhi
Ludhiana	IND	Punjab
Amritsar	IND	Punjab
Jalandhar (Jullundur)	IND	Punjab
New Delhi	IND	Delhi
Patiala	IND	Punjab
Bhatinda (Bathinda)	IND	Punjab
Pathankot	IND	Punjab
Hoshiarpur	IND	Punjab
Moga	IND	Punjab
Abohar	IND	Punjab
Delhi Cantonment	IND	Delhi



World_(E).sql

```

1  /* E) Write a query using MySQL that returns the given dataset. */
2
3  •  USE world;
4
5  •  SELECT
6      Name,
7      CountryCode,
8      District
9  FROM
10     world.city
11
12  WHERE
13     CountryCode = 'IND'
14  AND
15     District = 'Punjab'
16  OR
17     District = 'Delhi' ;
18

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	Name	CountryCode	District
▶	Delhi	IND	Delhi
	Ludhiana	IND	Punjab
	Amritsar	IND	Punjab
	Jalandhar (Jullundur)	IND	Punjab
	New Delhi	IND	Delhi
	Patiala	IND	Punjab
	Bhatinda (Bathinda)	IND	Punjab
	Pathankot	IND	Punjab
	Hoshiarpur	IND	Punjab
	Moga	IND	Punjab
	Abohar	IND	Punjab
	Delhi Cantonment	IND	Delhi