1 –
Business Understanding – High Level

Case Study

- The 2015 European Refugee Crisis: https://cases.open.ubc.ca/the-2015-european-refugee-crisis/

Introduction

The European refugee crisis has been a subject that is still ongoing. Asylum policies seeking to accommodate these refugees have proved ineffective thus far.

5W 1H Analysis
1 – Who

#	Question	Answer
Q1.1	Who is involved?	NGOS, asylum and refugee seekers, Public
Q1.2	Who is affected?	asylum and refugee seekers
Q1.3	Who will benefit?	asylum and refugee seekers
Q1.4	Who will be harmed?	asylum and refugee seekers

5W 1H Analysis
2 – What

#	Question	Answer
Q2.1	What is your topic narrowed down in a simple phrase/sentence?	EU applications trend from 2014 to 2018
Q2.2	What does your topic involve? (i.e. What are the different parts to it?)	EU asylum policies and it's effectiveness
Q2.3	What is it similar to / different from?	NA
Q2.4	What might be affected/changed by your topic?	

5W 1H Analysis
3 –When

#	Question	Answer
Q3.1	When does this take place? When did this take place? When will it take place? When should this take place?	Since 2013 till date
Q3.2	Does when this takes place affect the topic?	Yes, we are looking at a trend from 2014 to 2018

5W 1H Analysis
4 – Where

#	Question	Answer
Q4.1	Where does this take place? (Where did it …. Where will it … Where should it ….?)	European Borders/EU
Q4.2	Does it matter where it takes place? Is it affected by location?	Yes

5W 1H Analysis
5 – Why

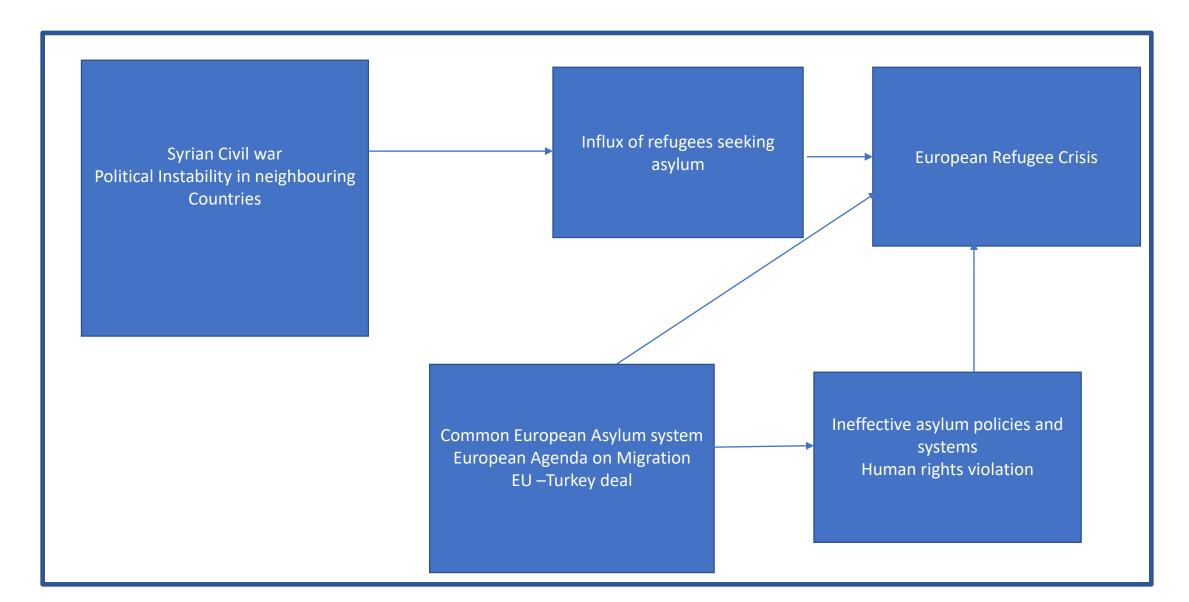| #	Question	Answer
Q5.1	Why is this topic important? Why does it matter?	To help drive informed decisions regarding effective asylum policies and practices.
Q5.2	Why do certain things happen? (What are some causes and effects within the topic?)	The Syrian civil war caused refugees to seek out asylum in Europe

5W 1H Analysis
6 – How

#	Question	Answer
Q6.1	How does this topic work? How does it function? How does it do what it does?	This topic is driven towards making effective policies which in turn help asylum seekers
Q6.2	How did it come to be?	NA
Q6.3	How are those involved affected?	

2 –
Data Understanding – High Level

Data Modeling – Conceptual Model

Data Dictionary

No	Topic	Definition
1	Asylum applicant	Total amount of asylum seekers
2	Sea arrivals	Amount of refugees that came through the sea route
3		
4		
5		
6		
7		
8		
9		
10		

1 (Revisited) – Business Understanding – Low Level

Business Questions

- What country has had the highest asylum seekers between 2009 to 2018?
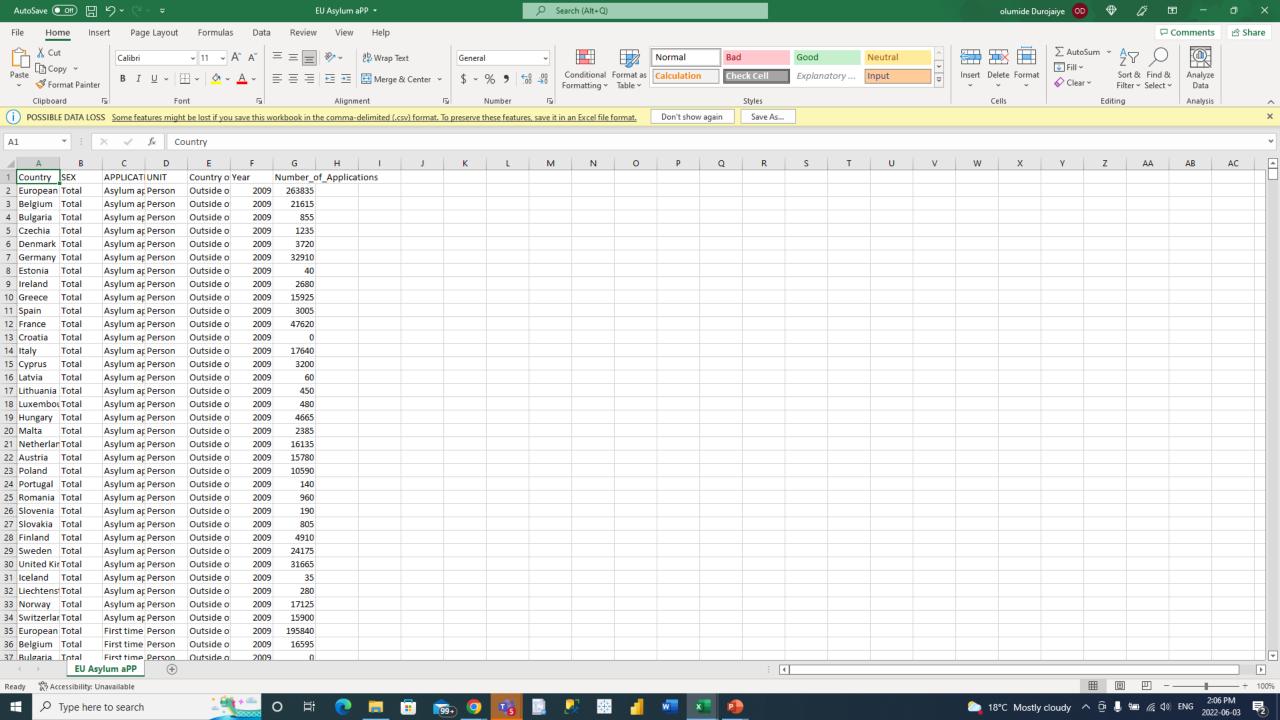
- It was reported there were sexual assaults in refugee camps. Why was this so? To solve this question, we aim to look at the ratio of male to female applicants to the EU between 2009 and 2018?
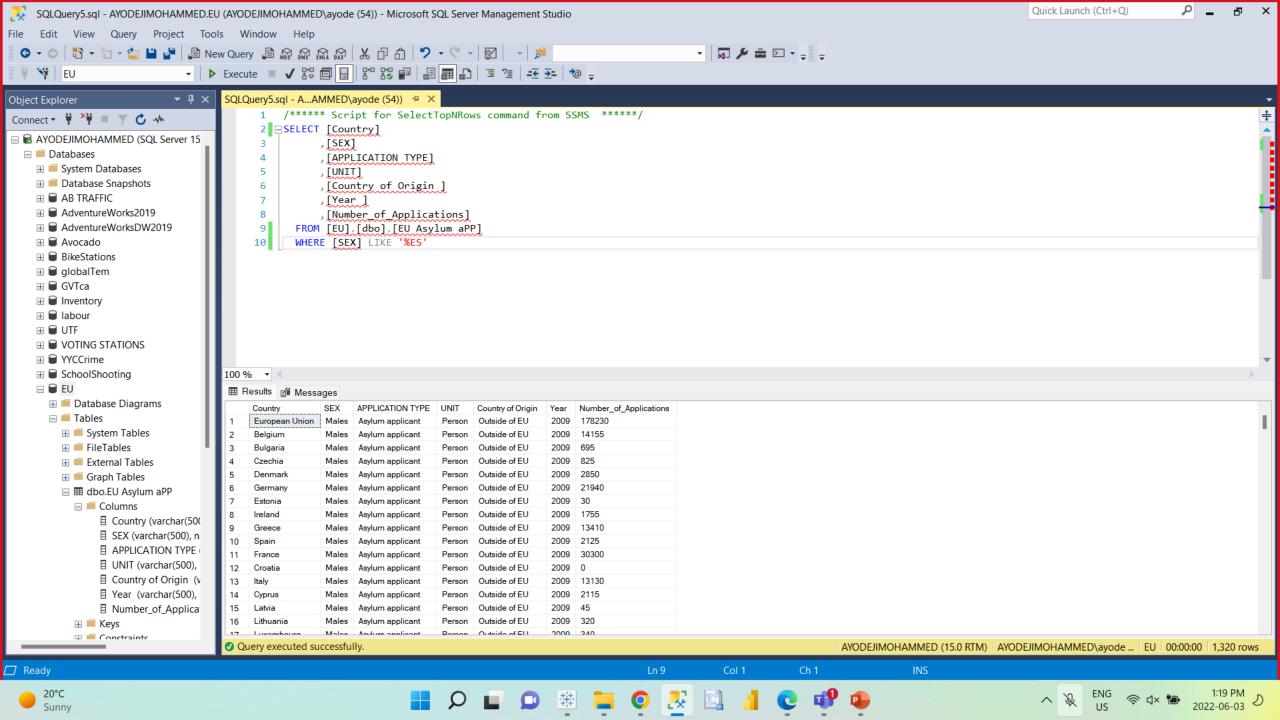
2 (Revisited) –
Data Understanding –
Low Level

Data Set(s)

- asylum applications in Europe.xls
- asylum applications in Europe - decision detail.xls

3 –
Data Preparation

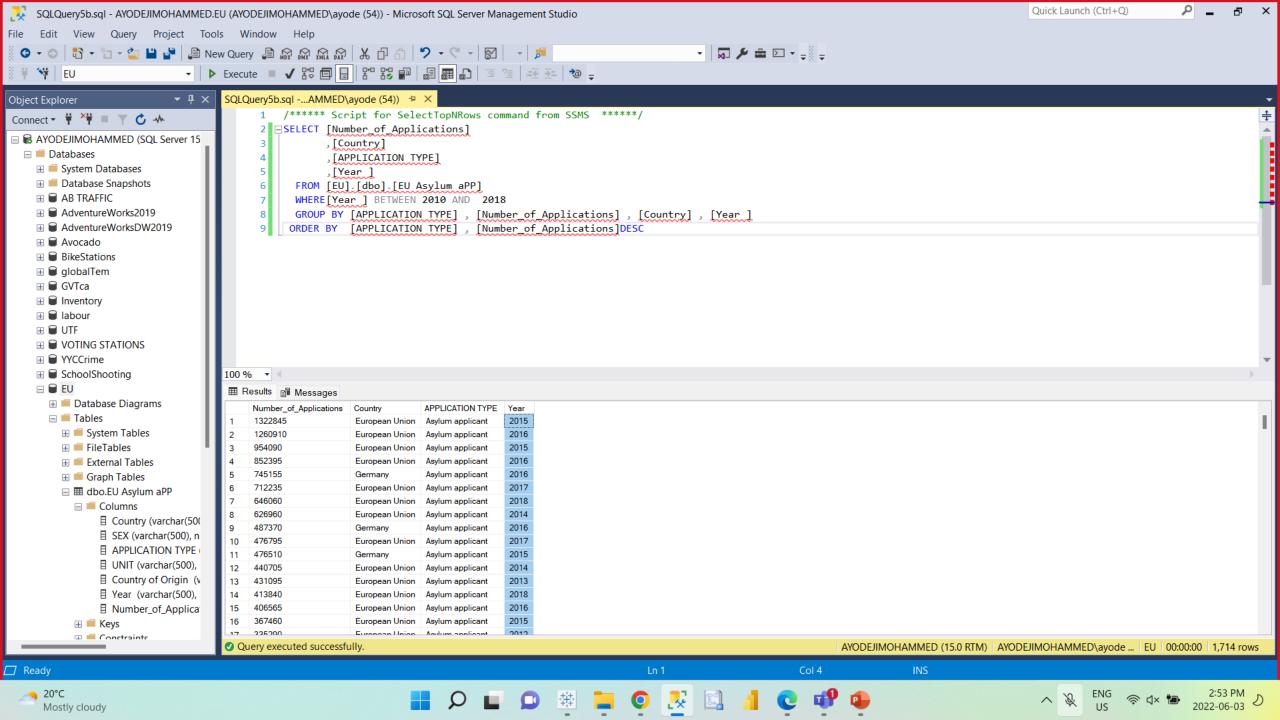| Country	SEX	APPLICATI	UNIT	Country o	Year	Number_of_Applications
European	Total	Asylum ap	Person	Outside o	2009	263835
Belgium	Total	Asylum ap	Person	Outside o	2009	21615
Bulgaria	Total	Asylum ap	Person	Outside o	2009	855
Czechia	Total	Asylum ap	Person	Outside o	2009	1235
Denmark	Total	Asylum ap	Person	Outside o	2009	3720
Germany	Total	Asylum ap	Person	Outside o	2009	32910
Estonia	Total	Asylum ap	Person	Outside o	2009	40
Ireland	Total	Asylum ap	Person	Outside o	2009	2680
Greece	Total	Asylum ap	Person	Outside o	2009	15925
Spain	Total	Asylum ap	Person	Outside o	2009	3005
France	Total	Asylum ap	Person	Outside o	2009	47620
Croatia	Total	Asylum ap	Person	Outside o	2009	0
Italy	Total	Asylum ap	Person	Outside o	2009	17640
Cyprus	Total	Asylum ap	Person	Outside o	2009	3200
Latvia	Total	Asylum ap	Person	Outside o	2009	60
Lithuania	Total	Asylum ap	Person	Outside o	2009	450
Luxembou	Total	Asylum ap	Person	Outside o	2009	480
Hungary	Total	Asylum ap	Person	Outside o	2009	4665
Malta	Total	Asylum ap	Person	Outside o	2009	2385
Netherlan	Total	Asylum ap	Person	Outside o	2009	16135
Austria	Total	Asylum ap	Person	Outside o	2009	15780
Poland	Total	Asylum ap	Person	Outside o	2009	10590
Portugal	Total	Asylum ap	Person	Outside o	2009	140
Romania	Total	Asylum ap	Person	Outside o	2009	960
Slovenia	Total	Asylum ap	Person	Outside o	2009	190
Slovakia	Total	Asylum ap	Person	Outside o	2009	805
Finland	Total	Asylum ap	Person	Outside o	2009	4910
Sweden	Total	Asylum ap	Person	Outside o	2009	24175
United Kir	Total	Asylum ap	Person	Outside o	2009	31665
Iceland	Total	Asylum ap	Person	Outside o	2009	35
Liechtens	Total	Asylum ap	Person	Outside o	2009	280
Norway	Total	Asylum ap	Person	Outside o	2009	17125
Switzerlar	Total	Asylum ap	Person	Outside o	2009	15900
European	Total	First time	Person	Outside o	2009	195840
Belgium	Total	First time	Person	Outside o	2009	16595
Bulgaria	Total	First time	Person	Outside o	2009	0

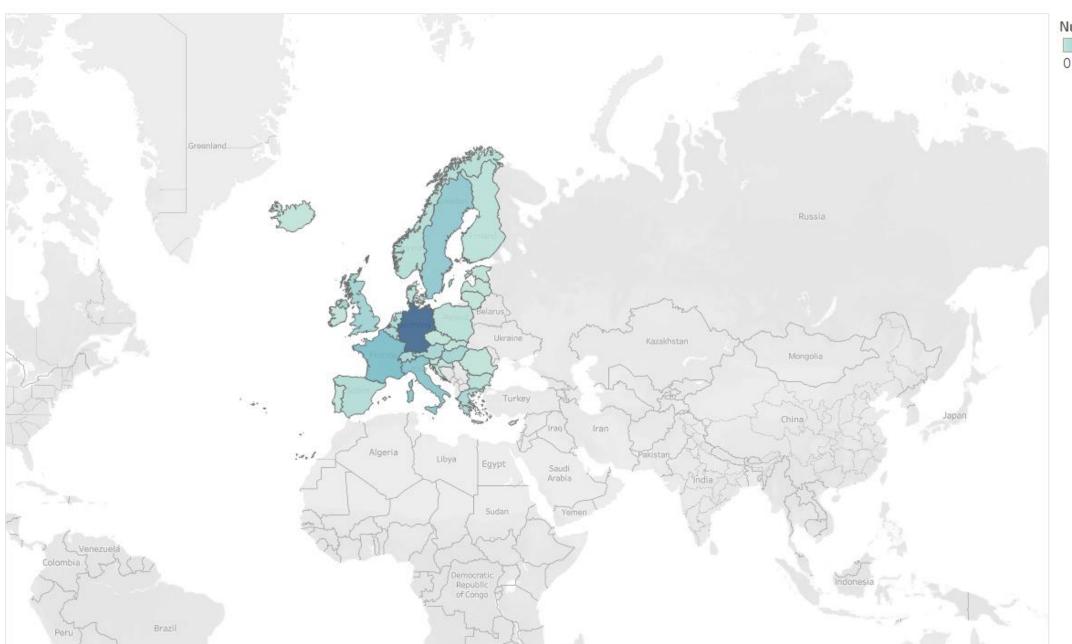# Data Preparation – SQL Query for Question 1

```
SELECT [Country]
,[SEX]
,[APPLICATION TYPE]
,[UNIT]
,[Country of Origin ]
,[Year ]
,[Number of Applications]
FROM [EU].[dbo].[EU Asylum aPP]
WHERE [SEX] LIKE '%ES'
```

```sql
SELECT [Number_of_Applications]
,[Country]
,[APPLICATION TYPE]
,[Year ]
FROM [EU].[dbo].[EU Asylum aPP]
WHERE[Year ] BETWEEN 2010 AND 2018
GROUP BY [APPLICATION TYPE] , [Number_of_Applications] , [Country] , [Year ]
ORDER BY [APPLICATION TYPE] , [Number_of_Applications]DESC
```
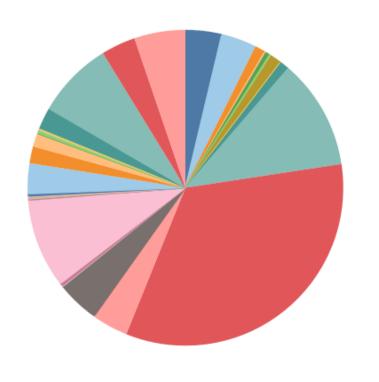
Quick Launch (Ctrl+Q)

File   Edit   View   Query   Project   Tools   Window   Help

EU

Object Explorer

Connect

AYODEJIMOHAMMED (SQL Server 15
  Databases
    System Databases
    Database Snapshots
    AB TRAFFIC
    AdventureWorks2019
    AdventureWorksDW2019
    Avocado
    BikeStations
    globalTem
    GVTca
    Inventory
    labour
    UTF
    VOTING STATIONS
    YYCCrime
    SchoolShooting
    EU
      Database Diagrams
      Tables
        System Tables
        FileTables
        External Tables
        Graph Tables
        dbo.EU Asylum aPP
          Columns
            Country (varchar(50(
            SEX (varchar(500), n
            APPLICATION TYPE (
            UNIT (varchar(500),
            Country of Origin (v
            Year (varchar(500),
            Number_of_Applica
          Keys
        Constraints

```sql
/****** Script for SelectTopNRows command from SSMS  ******/
SELECT [Number_of_Applications]
      ,[Country]
      ,[APPLICATION TYPE]
      ,[Year ]
  FROM [EU].[dbo].[EU Asylum aPP]
  WHERE[Year ] BETWEEN 2010 AND  2018
  GROUP BY [APPLICATION TYPE] , [Number_of_Applications] , [Country] , [Year ]
  ORDER BY  [APPLICATION TYPE] , [Number_of_Applications]DESC
```

100 %

Results   Messages

	Number_of_Applications	Country	APPLICATION TYPE	Year
1	1322845	European Union	Asylum applicant	2015
2	1260910	European Union	Asylum applicant	2016
3	954090	European Union	Asylum applicant	2015
4	852395	European Union	Asylum applicant	2016
5	745155	Germany	Asylum applicant	2016
6	712235	European Union	Asylum applicant	2017
7	646060	European Union	Asylum applicant	2018
8	626960	European Union	Asylum applicant	2014
9	487370	Germany	Asylum applicant	2016
10	476795	European Union	Asylum applicant	2017
11	476510	Germany	Asylum applicant	2015
12	440705	European Union	Asylum applicant	2014
13	431095	European Union	Asylum applicant	2013
14	413840	European Union	Asylum applicant	2018
15	406565	European Union	Asylum applicant	2016
16	367460	European Union	Asylum applicant	2015
17	335290	European Union	Asylum applicant	2013

Query executed successfully.   AYODEJIMOHAMMED (15.0 RTM)   AYODEJIMOHAMMED\ayode ...   EU   00:00:00   1,714 rows

Ready   Ln 1   Col 4   INS

20°C
Mostly cloudy

ENG
US

2:53 PM
2022-06-03

4 –
Modeling

Map based on Longitude (generated) and Latitude (generated). Color shows sum of Number of Applications. Details are shown for Country. The data is filtered on SEX, which keeps Females and Males. The view is filtered on Country, which excludes European Union.
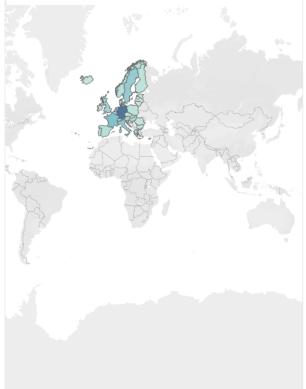
Gender by country

Country
- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czechia
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Iceland
- Ireland
- Italy
- Latvia
- Liechtenstein
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Norway
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- Switzerland
- United Kingdom

Country (color). Details are shown for SEX. The view is filtered on Country and SEX. The Country filter excludes European Union. The SEX filter keeps Females and Males.

SEX	Year	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czechia	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Latvia	Liechtens..	Lithuania	Luxembo..	Malta	Netherla..	Norway	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	Switzerla..	United Ki..
Females	2009	4,845	13,580	160	0	2,170	625	1,740	20	1,120	33,235	20,315	2,515	1,105	10	1,835	9,020	30	30	165	140	880	10,540	8,665	8,945	70	105	90	70	880	16,815	7,780	23,190
	2010	3,255	17,345	165	0	2,090	370	2,410	10	800	37,545	32,890	1,590	315	10	1,320	5,080	10	40	220	245	145	11,615	6,535	5,130	80	120	105	85	1,555	24,015	8,190	16,560
	2011	3,750	19,690	285	0	1,280	335	2,190	20	810	40,505	36,395	4,260	390	15	1,015	9,880	175	25	170	1,705	735	9,805	5,810	5,610	95	190	60	80	1,765	21,405	11,795	17,775
	2012	4,560	16,140	510	0	1,075	380	3,710	30	1,320	45,365	54,445	3,310	420	20	705	4,865	85	20	175	1,555	910	8,990	6,210	8,985	75	390	135	85	1,555	32,185	15,770	19,090
	2013	4,970	12,485	4,420	230	885	385	4,860	30	1,015	48,515	87,230	1,755	2,010	25	715	7,180	70	0	120	570	735	8,405	7,010	14,205	270	895	35	80	1,920	37,550	10,260	19,945
	2014	13,060	13,150	5,080	55	1,135	735	7,110	75	2,015	47,655	127,830	3,425	20,000	45	885	9,690	245	25	280	720	520	12,520	5,565	6,485	340	705	125	185	3,540	50,920	13,430	21,755
	2015	48,035	24,070	8,475	30	1,780	935	12,295	160	11,895	52,580	286,315	6,460	72,330	175	1,310	19,200	180	0	190	1,465	875	23,735	14,250	11,135	510	655	235	85	11,535	93,960	21,495	21,280
	2016	27,300	11,795	8,690	630	2,260	1,030	3,750	135	3,790	56,495	503,625	37,955	13,115	625	1,705	36,700	260	60	330	1,195	1,080	12,480	2,585	10,690	700	1,305	70	435	12,655	20,885	15,520	24,630
	2017	18,920	11,830	1,840	300	2,865	800	1,440	160	2,905	70,450	164,945	36,850	2,470	470	2,175	41,110	290	125	405	1,120	1,005	9,435	2,865	3,680	1,070	3,455	60	265	29,815	19,625	11,605	23,290
	2018	10,410	14,220	910	415	4,790	905	2,720	40	2,400	81,325	147,390	43,200	525	410	2,645	27,610	115	85	270	1,275	890	12,765	2,160	2,985	880	1,240	85	550	45,690	16,025	10,095	25,020
Males	2009	10,935	24,620	695	0	4,230	1,230	5,700	55	3,735	56,455	40,130	13,410	3,560	25	3,495	26,260	80	245	495	340	3,885	20,450	24,940	11,300	210	855	720	300	2,125	30,960	22,530	39,010
	2010	7,790	30,295	860	0	3,615	785	7,720	50	2,250	63,210	56,780	8,650	1,780	35	2,525	14,920	55	65	545	535	410	16,760	12,750	5,740	230	770	745	345	3,735	39,620	20,635	30,300
	2011	10,670	37,575	1,305	0	2,240	895	5,690	110	2,090	68,965	62,440	14,310	1,315	55	1,555	70,735	500	45	765	2,360	2,990	16,340	11,705	6,265	180	3,225	430	580	4,620	37,880	31,035	34,950
	2012	12,855	30,270	2,110	0	2,150	865	8,380	120	3,475	70,335	87,335	15,850	1,735	90	1,185	29,640	310	50	1,030	2,490	3,225	13,760	12,675	10,940	275	4,540	595	470	3,365	55,505	38,385	37,555
	2013	12,530	20,510	9,705	1,900	1,525	800	9,480	160	5,070	78,230	148,725	6,470	1,165	100	1,165	45,160	310	0	560	1,490	3,715	14,475	16,355	15,005	730	2,000	75	435	6,850	65,945	30,350	40,240
	2014	40,650	23,605	16,805	775	2,080	1,320	22,105	225	5,070	75,500	247,520	13,595	63,985	125	2,000	118,595	495	40	545	1,455	2,110	33,750	16,760	7,140	540	2,340	435	560	7,535	105,245	32,050	43,080
	2015	125,630	59,580	32,070	315	2,560	1,815	29,465	295	52,475	94,150	630,260	18,115	279,200	555	5,235	147,170	475	0	400	3,400	2,665	64,120	47,330	11,305	830	1,830	360	450	17,845	224,605	56,010	58,540
	2016	54,835	20,730	29,720	3,735	3,505	1,645	8,485	190	7,085	104,565	959,985	63,025	44,530	1,600	2,775	207,450	435	100	520	3,030	2,585	27,745	4,140	11,390	1,470	2,425	175	2,140	18,665	30,235	37,440	54,295
	2017	28,250	20,550	5,325	1,555	6,150	1,785	4,905	215	6,410	120,845	255,540	78,745	4,030	1,680	3,665	214,290	420	165	665	3,635	2,450	24,835	4,000	4,370	1,700	6,070	245	2,645	39,825	28,890	23,020	45,785
	2018	14,875	26,435	4,090	1,065	10,465	2,135	4,320	145	5,040	150,515	198,495	88,745	780	1,095	4,680	85,775	245	230	520	3,290	3,275	31,710	3,025	3,535	1,640	2,840	245	5,125	61,090	23,605	18,530	49,905

Country

0   959,985

Sum of Number of Applications broken down by Country vs. SEX and Year. Color shows sum of Number of Applications. The marks are labeled by sum of Number of Applications. The view is filtered on Country and SEX. The Country filter excludes European Union. The SEX filter keeps Females and Males.
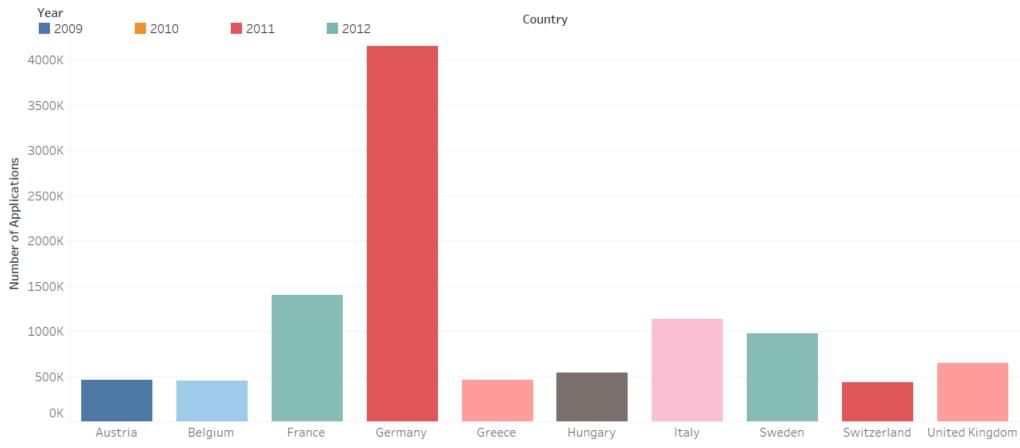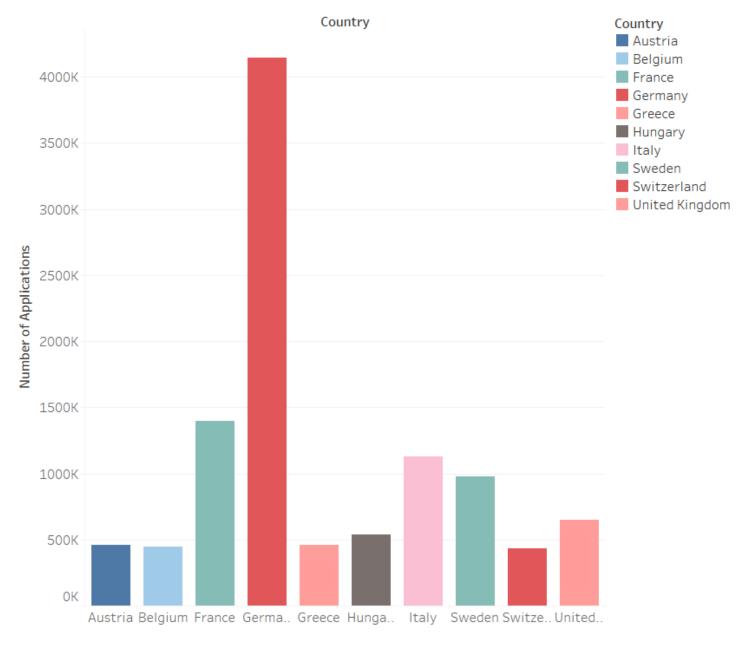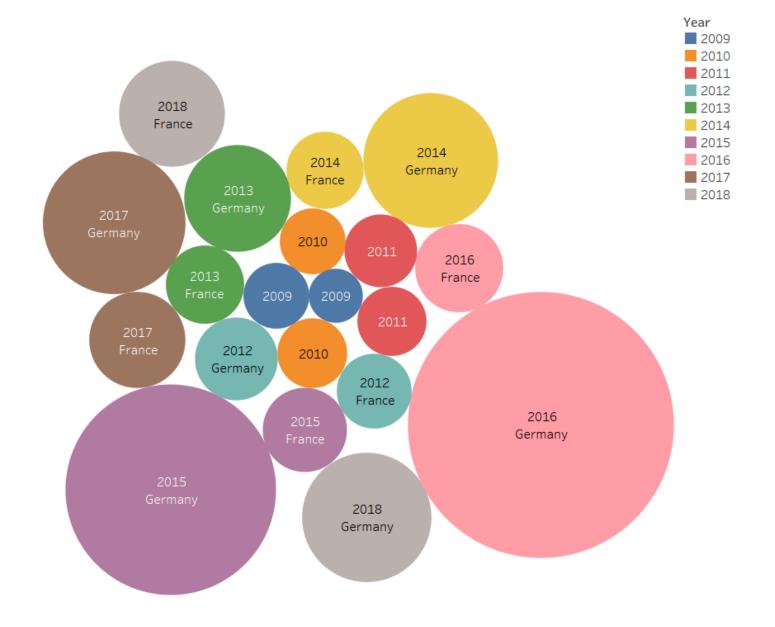
Gender by country

		0 ▭ 959,985							
					Country				
SEX	Year	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Latvia
Females	2009	33,235	20,315	2,515	1,105	10	1,835	9,020	
	2010	37,545	32,890	1,590	315	10	1,320	5,080	
	2011	40,505	36,395	4,260	390	15	1,015	9,880	
	2012	45,365	54,445	3,310	420	20	705	4,865	
	2013	48,515	87,230	1,755	2,010	25	715	7,180	
	2014	47,655	127,830	3,425	20,000	45	885	9,690	
	2015	52,580	286,315	6,460	72,330	175	1,310	19,200	
	2016	56,495	503,625	37,955	13,115	625	1,705	36,700	
	2017	70,450	164,945	36,850	2,470	470	2,175	41,110	
	2018	81,325	147,390	43,200	525	410	2,645	27,610	
Males	2009	56,455	40,130	13,410	3,560	25	3,495	26,260	
	2010	63,210	56,780	8,650	1,780	35	2,525	14,920	
	2011	68,965	62,440	14,310	1,315	55	1,555	70,735	
	2012	70,335	87,335	15,850	1,735	90	1,185	29,640	
	2013	78,230	148,725	6,470	26,305	100	1,165	45,160	
	2014	75,500	247,520	13,595	63,985	125	2,000	118,595	
	2015	94,150	630,260	18,115	279,200	555	5,235	147,170	
	2016	104,565	959,985	63,025	44,530	1,600	2,775	207,450	
	2017	120,845	255,540	78,745	4,030	1,680	3,665	214,290	
	2018	150,515	198,495	88,745	780	1,095	4,680	85,775	

Country
■ Austria ■ Belgium ■ France ■ Germany

Year
0 □□□ 1M

Country	014	2015	2016	2017	2018
Austria	10	173,665	82,135	47,170	25,28
Belgium	55	83,650	32,525	32,380	40,65
France	55	146,730	161,060	191,295	231,84
Germany	50	916,575	1,463,610	420,485	345,88
Greece	020	24,575	100,980	115,595	131,94
Hungary	085	351,530	57,645	6,500	1,30
Italy	285	166,370	244,150	255,400	113,38
Sweden	65	318,565	51,120	48,515	39,63
Switzerl	00	77,505	52,060	34,625	38,63

Year
■ 2009 ■ 2010 ■ 2011 ■ 2012

Country

Number of Applications

Country

Sum of Number of Applications for each Country. Color shows details about Country. Details are shown for Year. The data is filtered on SEX, which keeps Females and Males. The view is filtered on Year and Country. The Year filter keeps 10 of 10 members. The Country filter keeps 10 of 33 members.

Year and Country. Color shows details about Year. Size shows sum of Number of Applications. The marks are labeled by Year and Country. The data is filtered on maximum of Country and SEX. The maximum of Country filter keeps 32 members. The SEX filter keeps Females and Males. The view is filtered on Year and Country. The Year filter keeps 10 of 10 members. The Country filter keeps France and Germany.

Country

Number of Applications

- 4000K
- 3500K
- 3000K
- 2500K
- 2000K
- 1500K
- 1000K
- 500K
- 0K

Austria | Belgium | France | Germany | Greece | Hungary | Italy | Sweden | Switzerland | United Kingdom

5 – Evaluation

Conclusion – Answer to Question 1

We discover according to the visuals, there were more male applicants to female applicants between 2009 to 2018 – therefore creating male dominance in refugee camps which in turn leads to reported sexual assaults.

Conclusion – Answer to Question 2

From the visuals Germany has had the highest amount of asylum seekers between 2009 to 2018.

This validates the article which says that "Majority of refugees and migrants preferred going to northern and western Europe, particularly Germany and Sweden, where reception and support facilities were deemed to be better.