**Module 8 Critical Thinking Assignment**

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MIS581: Capstone – Business Intelligence and Data Analytics

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**Module 8 Critical Thinking Assignment**

SAS Code

proc sgplot data=WORK.IMPORT;

vbar Year /;

yaxis grid;

run;

ods graphics / reset;

Output:

**Figure 1**

**Graph on Crimes Reported for Los Angeles, CA by Year**

A graph of a number of years

Description automatically generated

Notes: Graph was created in SAS OnDemand using California Crime Data from the FBI’s UCR reporting system.

SQL Code

SELECT Year,

Count([DR\_NO]) as 'Total Crimes'

,Count ([Weapon\_Desc]) as 'Crimes with Weapon'

,(Count([Weapon\_Desc])\*100.0)/(Count ([DR\_NO])) as '% of Crimes with Weapon'

FROM [ET\_Dashboard\_Dev].[dbo].[LA Crime]

Where Year >= '2020'

Group by Year

Order by Year

Qlik Code

[LA Crime]:

SELECT "DR\_NO",

"Date\_Rptd",

"DATE\_OCC",

"Year",

"TIME\_OCC",

AREA,

"AREA\_NAME",

"Rpt\_Dist\_No",

"Part\_1\_2",

"Crm\_Cd",

"Crm\_Cd\_Desc",

Mocodes,

"Vict\_Age",

"Vict\_Sex",

"Vict\_Descent",

"Premis\_Cd",

"Premis\_Desc",

"Weapon\_Used\_Cd",

"Weapon\_Desc",

Status,

"Status\_Desc",

"Crm\_Cd\_1",

"Crm\_Cd\_2",

"Crm\_Cd\_3",

"Crm\_Cd\_4",

LOCATION,

"Cross\_Street",

LAT,

LON

FROM "ET\_Dashboard\_Dev".dbo."LA Crime";

[Denver Crime]:

SELECT "incident\_id",

"offense\_id",

"offense\_code",

"offense\_code\_extension",

"offense\_type\_id",

"offense\_category\_id",

"first\_occurrence\_date",

"Year",

"last\_occurrence\_date",

"reported\_date",

"incident\_address",

"geo\_x",

"geo\_y",

"geo\_lon",

"geo\_lat",

"district\_id",

"precinct\_id",

"neighborhood\_id",

"is\_crime",

"is\_traffic",

"victim\_count"

FROM "ET\_Dashboard\_Dev".dbo."Denver Crime";

[Crime Change]:

SELECT "Year",

"LA\_Crime",

"LA\_Change\_YoY",

"Denver\_Crime",

"Denver\_Change\_YoY"

FROM "ET\_Dashboard\_Dev".dbo."Crime Change";

LA Crimes Formula:

Dimension = year  
Measure = Count(DR\_NO)

LA Crimes with a weapon formula:

Dimension = year  
Measure = Count(Weapon\_Desc)

% of crimes with a weapon formula:

Dimension = year  
Measure = Count(Weapon\_Desc)/Count(DR\_NO)

Colorado Crimes formula:

Dimension = year  
Measure = Count(incident\_id)

Output:

**Figure 3**

Qlik Dashboard

A screenshot of a computer screen

Description automatically generated

Notes: Created using Los Angeles, California crime data from the FBI’s UCR reporting system, and NIBRS data for Denver, Colorado.