Daniel DeCarlo

Box # 107

CIS 221

Prof. Sabal

2/22/19

Weather Database Project 1

For question one, it is asking what weather type in the United States is most harmful to population health. Population health means the how the population is doing physically and the two columns that correspond to this category best is fatalities and injuries. Therefore I made the following query where I chose the specific columns of fatalities, injuries, and the event type. I added the function SUM to fatalities and injuries because I want to see what the total amount of fatalities and injuries there are for each specific event. Then I used FROM Data because that is where all the weather information is stored. I then decided to group the data to make it more organized because there is a lot of data in the database. I used the GROUP BY clause so the repeating weather categories can be in one group. For example, in the data if there was multiple Tornado entries the clause would then put all Tornados into one tornado group. This significantly change the amount of data and gave the total result of 812 rows from the 40000 plus. After I decided to use the ORDER BY clause because I needed to see the largest value first. I used ORDER BY Max (fatalities) DESC because I wanted to see what weather type had the largest fatality because that is associated with population health since people dying impact the population. I added DESC to get the greatest value first. When I ran this query I found that the highest weather type with the most deaths is Tornados and it makes sense because they happen frequently in the United States and they take the lives of a lot of people.

Question two is asking which weather type has the greatest economic consequence. For this query I started by selecting which columns I wanted to use. I decided to use the ones that relate to economics which is propdmg, propdmgexp and evtype. These columns show me the event type and the property damage that followed the event. In the select clause I added SUM to the propdmg row name to get the sum of the damage for the event type. Next I used the FROM clause to specify where I wanted to get the data from, in this query I chose FROM Data. Then I used WHERE Propdmgexp = ‘M’ because M in this data means million and it won’t include K which is thousand and anything lower. I then added the GROUP BY clause to group the data and I decided to group it by the weather event. Then I included the ORDER BY to the order the data. I decided to order the data by the MAX (PROPDMG) DESC so the highest values can appear first. In this query the highest value of property damage is tornado with $37769 million, then flood with $11023 million and hurricanes with $2943 million. These events cost so much because they destroy almost everything and since they happen more frequently than other weather types and are more severe the more damage there is which means more money for repairs.

QUESTION ONE QUERY:

SELECT evtype AS event, SUM(fatalities) AS deaths, SUM(injuries) AS injured

FROM Data

GROUP BY EVTYPE

ORDER BY MAX(fatalities) DESC

QUESTION TWO QUERY:

SELECT SUM(propdmg) AS DMG, PROPDMGEXP, EVTYPE AS event

FROM Data

WHERE PROPDMGEXP = 'm'

GROUP BY EVTYPE

ORDER BY MAX(PROPDMG)DESC