Planning International Travel for the Family Reunion: Wine Tours

Your relatives have heard that you are studying how to analyze different kinds of data and are able to make informed recommendations. The family wants to do something different for this year’s family reunion, maybe travel together. You are asked to plan different options for a family reunion to occur in Europe with the theme of a wine tour. Especially uncle Sven heard that you are getting a good MIS education at WSU and asks if you can provide any suggestions about where to travel and drink some great wine. Write a short report with recommendations about where the family should travel to for example France vs. Italy vs. California. Here is some information about the data that was found.

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| --- | --- |
| The [Featherman\_Analytics].[dbo].[wine] table contains 150,000 different bottles of wine. Each bottle of wine is priced, and graded for quality with the name of winery and geographic location provided. |  |
| USE [Featherman\_Analytics]  SELECT [country], [Province], [Specific Region], [Winery], [Type]  If you use this query, be sure in the query editor to change the datatype to decimal for the two numeric columns (Avg. Score and Avg. Price). You can right click the column in the query editor and change the data type.  , FORMAT(AVG([Points]), 'N1') as [Avg. Score]  , FORMAT(AVG([Price]), 'N1') as [Avg. Price]  FROM [dbo].[wine]  WHERE [Province] IS NOT NULL  GROUP BY [country], [Province], [Specific Region], [Winery], [Type]  HAVING COUNT([Type]) >10  ORDER BY AVG([Points]) DESC | Use this query to get a feel for the dataset but use the next query to produce the analytics report.  Run this query in SSMS. It displays the list of larger wineries that have at least 10 types of wine for sale. This HAVING filter helps cut down the massive list of wineries to eliminate some of the smaller perhaps more quality variant wineries. You can use the dataset produced by this query to get a rough feel of the dataset.   Here we find the country/province and region where the highest quality type of each wine is produced. The wines are graded and the average score of the wine type is presented for the winery. |
|  | Here is the output of the query approximate 2100 rows showing the best larger wineries for quality wine. IT is assumed that these wineries are closer to towns that have multiple hotels. For example the Cayuse winery sells over 10 different types of syrah with an average quality score of their syrah being 97.8.  You can use this initial query in PowerBI to identify where the good wineries are and you can filter this list by wine type.  This query is good for some initial cross-tabs and column charts to get an idea of the dataset and location of the wineries. |
| USE [Featherman\_Analytics];  SELECT \*  FROM [dbo].[wine]  WHERE [Type] IN ('red blend', 'white blend', 'muscat', 'Bordeaux-style Red Blend','Bordeaux-style White Blend', 'Cabernet Sauvignon', 'Cabernet Franc', 'Champagne Blend', 'chardonnay', 'Chenin Blanc', 'grenache', 'malbec', 'merlot', 'pinot noir', 'Riesling', 'Sangiovese', 'Sauvignon Blanc', 'shiraz', 'syrah', 'sparkling blend', 'zinfandel' ) | The query on the left can also be used to produce the analysis. The top 21 most common wine varieties are used as the filter to reduce the 150,000 different bottles to  104,000.  Check the appendix to identify the types of wine that were filtered out from the list. Make your reports from this query or the prior, and feel free to add back some of the wine varieties from the appendix into the WHERE statement on the left. |

**Report requirement #1**

The family wants to drink excellent wine and visit different wineries every day. It would make sense to fly/motor to a town or region that has many wineries that can be reached by bus. Many of the family want to hold the reunion in Europe and ask for 2 different suggested tour types:  
  
a) budget conscious  
b) semi-luxury tour  
  
Produce a Power BI file that shows your thought and research process and the underlying charts/tables/maps that formulate your recommendations, for option A and B. Make a recommendation of what region(s) in what country to attend. There are 30 to 40 family members that will travel so you have to factor in that moving around will be logistically difficult. The family members have different interest levels and taste in wine, and are intrigued by the dataset that can rates the wine.   
  
You have to figure out how to segment the dataset into lower cost and higher cost wine varieties and regions in general. Also you might consider adding your own metric comparing points after factoring in cost. For example brand names come into play and inflate wine prices. A 90 point rating of the same variety of wine can vary widely in price depending on region and brand name. For example if the family liked champagne, going to one region of France would be expensive, but if the term was changed to sparkling blend (bubbly wine not in the Champagne region of France) then a more reasonably priced tour can be planned out.  
  
So provide a region, your recommendation and justification for both the budget conscious tour and for the luxury tour.

Report requirement #2  
  
Some influential members of la familia are very interested in visiting wineries that sell a type of wine such as Riesling, Chardonnay, Merlot, Pinot Noir, etc. You can choose the type of wine that is researched.  
  
The family wants to hold the reunion in Europe centered around one wine type (your choice) and asks for 2 different suggested tour types  
a) budget conscious  
b) semi- luxury tour

Produce the same turn-in as above. The final turn-in is a) either a PowerBI .pbix file or URL produced from publishing the report, and B) 1 or 2 pages of your recommendation and reasoning. The PowerBI content should be presentation ready with charts/tables/maps. Better grades for better quality and explanation of the research method and analysis process.

Appendix  
These are the types of wine that are removed from the second query. These are lesser known varieties. This gives you an idea at how datasets need to be pruned down to reduce the cardinality of columns so that you can focus analysis on the research problem at hand.

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| --- | --- | --- | --- | --- |
| Type |  |  |  |  |
| Å½ilavka | Assyrtico | Cabernet | Carignan-Syrah | Chenin Blanc-Viognier |
| Agiorgitiko | Assyrtiko | Cabernet Blend | CarineÃ±a | Chinuri |
| Aglianico | Athiri | Cabernet Franc-Cabernet Sauvignon | CarmenÃ¨re | Ciliegiolo |
| Aidani | Austrian Red Blend | Cabernet Franc-CarmenÃ¨re | CarmenÃ¨re-Cabernet Sauvignon | Cinsault |
| Airen | Austrian white blend | Cabernet Franc-Malbec | CarmenÃ¨re-Syrah | Clairette |
| Albana | Auxerrois | Cabernet Franc-Merlot | Carnelian | Claret |
| AlbarÃ­n | Avesso | Cabernet Franc-Tempranillo | Carricante | Cococciola |
| AlbariÃ±o | Azal | Cabernet Merlot | Casavecchia | Coda di Volpe |
| Albarossa | Baco Noir | Cabernet Moravia | CastelÃ£o | Colombard |
| Aleatico | Baga | Cabernet Pfeffer | Catalanesca | Colombard-Sauvignon Blanc |
| Alfrocheiro | Baga-Touriga Nacional | Cabernet Sauvignon and Tinta Roriz | Catarratto | Colombard-Ugni Blanc |
| Alicante | Barbera | Cabernet Sauvignon Grenache | Cayuga | Colorino |
| Alicante Bouschet | Bastardo | Cabernet Sauvignon-Cabernet Franc | Cerceal | Cortese |
| AligotÃ© | Bical | Cabernet Sauvignon-CarmenÃ¨re | Cesanese d'Affile | Corvina |
| Alsace white blend | Black Monukka | Cabernet Sauvignon-Malbec | Chambourcin | Corvina, Rondinella, Molinara |
| Altesse | Black Muscat | Cabernet Sauvignon-Merlot | Charbono | Counoise |
| AlvarelhÃ£o | Blatina | Cabernet Sauvignon-Merlot-Shiraz | Chardonel | Crespiello |
| Alvarinho | Blauburgunder | Cabernet Sauvignon-Sangiovese | Chardonelle | Cserszegi FÅ±szeres |
| Alvarinho-Chardonnay | Blauer Portugieser | Cabernet Sauvignon-Shiraz | Chardonnay Weissburgunder | Dafni |
| Angevine | BlaufrÃ¤nkisch | Cabernet Sauvignon-Syrah | Chardonnay-AlbariÃ±o | Debit |
| Ansonica | BoÄŸazkere | Cabernet Sauvignon-Tempranillo | Chardonnay-Pinot Blanc | DoÃ±a Blanca |
| AntÃ£o Vaz | Bobal | Cabernet-Shiraz | Chardonnay-Pinot Grigio | Dolcetto |
| Apple | Bombino Bianco | Cabernet-Syrah | Chardonnay-Pinot Gris | Dornfelder |
| AragonÃªs | Bonarda | Cannonau | Chardonnay-Sauvignon | Duras |
| Aragonez | Bovale | Caprettone | Chardonnay-Sauvignon Blanc | Durello |
| Argaman | Brachetto | CariÃ±ena-Garnacha | Chardonnay-Semillon | Durif |
| Arinto | Braucol | Carignan | Chardonnay-Viognier | Edelzwicker |
| Arneis | Bual | Carignane | Chasselas | Elbling |
| Asprinio | Bukettraube | Carignan-Grenache | Chenin Blanc-Chardonnay | Emir |
|  | CÃ³dega do Larinho | Carignano | Chenin Blanc-Sauvignon Blanc | Enantio |
|  |  |  |  | Encruzado |
|  |  |  |  |  |
| Erbaluce | Garnacha-Tempranillo | Hondarrabi Zuri | Macabeo-Chardonnay | MarÃ©chal Foch |
| Espadeiro | Gelber Muskateller | Huxelrebe | Macabeo-GewÃ¼rztraminer | Marsanne |
| Falanghina | Gelber Traminer | Incrocio Manzoni | Macabeo-Moscatel | Marsanne-Roussanne |
| Favorita | GewÃ¼rztraminer | Insolia | Madeira Blend | Marsanne-Viognier |
| Fer Servadou | GewÃ¼rztraminer-Riesling | Inzolia | Madeleine Angevine | Marzemino |
| FernÃ£o Pires | Glera | Irsai Oliver | Magliocco | Mataro |
| Feteasca | Godello | JacquÃ¨re | Malagousia | Maturana |
| Feteasca Neagra | Gouveio | Jacquez | Malagouzia | Mauzac |
| FeteascÇŽ RegalÇŽ | GrÃ¼ner Veltliner | Jaen | Malbec Blend | Mavrodaphne |
| Fiano | Graciano | Johannisberg Riesling | Malbec-Bonarda | Mavrotragano |
| ForcallÃ | Gragnano | Kadarka | Malbec-Cabernet Franc | Mavroudi |
| FrÃ¼burgunder | Grauburgunder | Kalecik Karasi | Malbec-Cabernet Sauvignon | Mavrud |
| Franconia | Grecanico | Kallmet | Malbec-Merlot | Mazuelo |
| Frappato | Grechetto | Karalahna | Malbec-Petit Verdot | Melon |
| Freisa | Greco | Karasakiz | Malbec-Syrah | MencÃ­a |
| Friulano | Greco Bianco | Kekfrankos | Malbec-Tannat | Meoru |
| FumÃ© Blanc | Grenache Blanc | Kerner | Malbec-Tempranillo | Meritage |
| Furmint | Grenache Blend | Kinali Yapincak | Malmsey | Merlot-Argaman |
| Gaglioppo | Grenache Gris | KirÃ¡lyleÃ¡nyka | Malvar | Merlot-Cabernet |
| Gamay | Grenache-Carignan | Koshu | Malvasia | Merlot-Cabernet Franc |
| Gamay Noir | Grenache-MourvÃ¨dre | Kuntra | Malvasia Bianca | Merlot-Cabernet Sauvignon |
| Garganega | Grenache-Shiraz | Lacrima | Malvasia Fina | Merlot-Grenache |
| Garnacha | Grenache-Syrah | Lagrein | Malvasia Istriana | Merlot-Malbec |
| Garnacha Blanca | Grignolino | Lambrusco | Malvasia Nera | Merlot-Petite Verdot |
| Garnacha Blend | Grillo | Lambrusco di Sorbara | Malvasia-Viura | Merlot-Shiraz |
| Garnacha Tintorera | Grolleau | Lambrusco Grasparossa | Malvazija | Merlot-Syrah |
| Garnacha-Cabernet | Groppello | Lemberger | Malvoisie | Mission |
| Garnacha-Graciano | Gros and Petit Manseng | ListÃ¡n Negro | Mandilaria | Monastrell |
| Garnacha-Monastrell | Gros Manseng | Loin de l'Oeil | Mansois | Monastrell-Syrah |
| Garnacha-Syrah | G-S-M | Loureiro | Mantonico | Mondeuse |
|  | HÃ¡rslevelÃ¼ | MÃ¼ller-Thurgau | Manzoni | Monica |
|  |  | Macabeo |  |  |
|  |  |  |  |  |
| Montepulciano | Nasco | Petit Verdot | Plavac Mali | Romorantin |
| Morava | Nebbiolo | Petite Sirah | Port | RosÃ© |
| Morillon | Negrette | Petite Syrah | Portuguese Red | Rosado |
| Morio Muskat | Negroamaro | Petite Verdot | Portuguese RosÃ© | Rosato |
| Moristel | Nerello Cappuccio | Petroulianos | Portuguese Sparkling | Roscetto |
| Moscadello | Nerello Mascalese | Picapoll | Portuguese White | Roter Traminer |
| Moscatel | Nero d'Avola | Picolit | Portuguiser | Roter Veltliner |
| Moscatel de AlejandrÃ­a | Nero di Troia | Picpoul | Posip | Rotgipfler |
| Moscatel GraÃºdo | Neuburger | Pied de Perdrix | Premsal | Roussanne |
| Moscatel Roxo | Nielluciu | Piedirosso | PriÃ© Blanc | Roussanne-Grenache Blanc |
| Moscato | Norton | Pigato | Prieto Picudo | Roussanne-Marsanne |
| Moscato di Noto | Nosiola | Pignoletto | Primitivo | Roussanne-Viognier |
| Moscato Giallo | Nuragus | Pineau d'Aunis | Prokupac | Roviello |
| Moschofilero | Okuzgozu | Pinela | Prosecco | RuchÃ© |
| Moscofilero | Orange Muscat | Pinot Auxerrois | Provence red blend | Ruen |
| MourvÃ¨dre | Orangetraube | Pinot Bianco | Provence white blend | Rufete |
| Mtsvane | PaÃ­s | Pinot Blanc | Prugnolo Gentile | SÃ¤mling |
| Muscadel | Pallagrello | Pinot Blanc-Chardonnay | Pugnitello | SÃ©millon |
| Muscadelle | Pallagrello Bianco | Pinot Blanc-Pinot Noir | Rabigato | Sacy |
| Muscadet | Pallagrello Nero | Pinot Grigio | Raboso | Sagrantino |
| Muscat Blanc | Palomino | Pinot Grigio-Chardonnay | Rebula | Sangiovese Cabernet |
| Muscat Blanc Ã  Petit Grain | Pansa Blanca | Pinot Grigio-Sauvignon Blanc | Refosco | Sangiovese Grosso |
| Muscat Canelli | Pardina | Pinot Gris | RhÃ´ne-style Red Blend | Sangiovese-Cabernet Sauvignon |
| Muscat d'Alexandrie | Parraleta | Pinot Meunier | RhÃ´ne-style White Blend | Sangiovese-Syrah |
| Muscat Hamburg | Passerina | Pinot Nero | Ribolla Gialla | Saperavi |
| Muscat of Alexandria | Pecorino | Pinot Noir-Gamay | Rieslaner | Saperavi-Merlot |
| Muscatel | Pedro XimÃ©nez | Pinot Noir-Syrah | Rivaner | Sarba |
| Muskat | Pelaverga Piccolo | Pinotage | Rkatsiteli | Sauvignon |
| Muskat Ottonel | Perricone | Pinotage-Merlot | Robola | Sauvignon Blanc-Chardonnay |
| Muskateller | Petit Manseng | Pinot-Chardonnay | Roditis | Sauvignon Blanc-Chenin Blanc |
| Narince | Petit Meslier |  | Rolle | Sauvignon Blanc-Sauvignon Gris |
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|  |  |  |  |  |
| Sauvignon Blanc-Semillon | SpÃ¤tburgunder | Tempranillo-Cabernet Sauvignon | Traminette | Viognier |
| Sauvignon Blanc-Verdejo | St. George | Tempranillo-Garnacha | Trebbiano | Viognier-Chardonnay |
| Sauvignon Gris | St. Laurent | Tempranillo-Malbec | Trebbiano di Lugana | Viognier-Grenache Blanc |
| Sauvignon MusquÃ© | St. Vincent | Tempranillo-Merlot | Trebbiano-Malvasia | Viognier-Marsanne |
| Sauvignonasse | Steen | Tempranillo-Shiraz | Trepat | Viognier-Roussanne |
| Savagnin | Susumaniello | Teran | Trincadeira | Viognier-ValdiguiÃ© |
| Savatiano | Sylvaner | Teroldego | Trousseau Gris | Vitovska |
| Scheurebe | Symphony | Teroldego Rotaliano | Turbiana | Viura |
| Schiava | Syrah-Bonarda | Terret Blanc | Ugni Blanc | Viura-Chardonnay |
| Schwartzriesling | Syrah-Cabernet | Tinta Barroca | Ugni Blanc-Colombard | Viura-Sauvignon Blanc |
| Segalin | Syrah-Cabernet Franc | Tinta de Toro | Uva di Troia | Viura-Verdejo |
| Semillon-Chardonnay | Syrah-Cabernet Sauvignon | Tinta Fina | ValdiguiÃ© | Vranec |
| Semillon-Sauvignon Blanc | Syrah-Carignan | Tinta Francisca | Veltliner | Weissburgunder |
| Sercial | Syrah-Grenache | Tinta Negra Mole | Verdeca | Welschriesling |
| Seyval Blanc | Syrah-Grenache-Viognier | Tinta Roriz | Verdejo | White Port |
| Sherry | Syrah-Malbec | Tintilia | Verdejo-Sauvignon Blanc | White Riesling |
| Shiraz-Cabernet Sauvignon | Syrah-Merlot | Tinto del Pais | Verdejo-Viura | Xarel-lo |
| Shiraz-Grenache | Syrah-MourvÃ¨dre | Tinto Fino | Verdelho | Xinisteri |
| Shiraz-Malbec | Syrah-Petite Sirah | Tocai | Verdicchio | Xinomavro |
| Shiraz-Merlot | Syrah-Tempranillo | Tocai Friulano | Verduzzo | Xynisteri |
| Shiraz-MourvÃ¨dre | Syrah-Viognier | Tocai Rosso | Verduzzo Friulano | Yapincak |
| Shiraz-Pinotage | Tai | Tokaji | Vermentino | Zelen |
| Shiraz-Tempranillo | Tamjanika | Tokay | Vermentino Nero | Zibibbo |
| Shiraz-Viognier | Tannat | Tokay Pinot Gris | Vernaccia | Zierfandler |
| Sideritis | Tannat-Cabernet | Torbato | Vespaiolo | Zierfandler-Rotgipfler |
| Siegerrebe | Tannat-Cabernet Franc | Torontel | Vidadillo | Zlahtina |
| Silvaner | Tannat-Merlot | TorrontÃ©s | Vidal | Zweigelt |
| Silvaner-Traminer | Tannat-Syrah | Touriga Franca | Vidal Blanc |  |
| Siria | Tempranillo | Touriga Nacional | Vignoles |  |
| Sirica | Tempranillo Blanco | Touriga Nacional Blend | Vilana |  |
| SousÃ£o | Tempranillo Blend | Touriga Nacional-Cabernet Sauvignon | VinhÃ£o |  |
|  |  | Traminer |  |  |