```
In [ ]:    import pandas as pd
           import numpy as np
```

Q1- Look at an overview of your data.

```
In [12]:   reviews = pd.read_csv(r"C:\Users\eva\Desktop\assignements\winemag-data-130k-v2.csv",index_
           print(reviews.head(10))
```

```
     country                                        description  \
0      Italy  Aromas include tropical fruit, broom, brimston...
1   Portugal  This is ripe and fruity, a wine that is smooth...
2         US  Tart and snappy, the flavors of lime flesh and...
3         US  Pineapple rind, lemon pith and orange blossom ...
4         US  Much like the regular bottling from 2012, this...
5      Spain  Blackberry and raspberry aromas show a typical...
6      Italy  Here's a bright, informal red that opens with ...
7     France  This dry and restrained wine offers spice in p...
8    Germany  Savory dried thyme notes accent sunnier flavor...
9     France  This has great depth of flavor with its fresh ...


                          designation  points  price             province  \
0                        Vulkà Bianco      87    NaN    Sicily & Sardinia
1                            Avidagos      87   15.0                Douro
2                                 NaN      87   14.0               Oregon
3                 Reserve Late Harvest      87   13.0             Michigan
4   Vintner's Reserve Wild Child Block      87   65.0               Oregon
5                         Ars In Vitro      87   15.0       Northern Spain
6                             Belsito      87   16.0    Sicily & Sardinia
7                                 NaN      87   24.0               Alsace
8                               Shine      87   12.0          Rheinhessen
9                         Les Natures      87   27.0               Alsace


             region_1           region_2        taster_name  \
0                Etna                NaN     Kerin O'Keefe
1                 NaN                NaN        Roger Voss
2   Willamette Valley  Willamette Valley       Paul Gregutt
3  Lake Michigan Shore               NaN  Alexander Peartree
4   Willamette Valley  Willamette Valley       Paul Gregutt
5             Navarra                NaN   Michael Schachner
6            Vittoria                NaN     Kerin O'Keefe
7              Alsace                NaN        Roger Voss
8                 NaN                NaN  Anna Lee C. Iijima
9              Alsace                NaN        Roger Voss


   taster_twitter_handle                                              title  \
0          @kerinokeefe                     Nicosia 2013 Vulkà Bianco  (Etna)
1            @vossroger       Quinta dos Avidagos 2011 Avidagos Red (Douro)
2           @paulgwine       Rainstorm 2013 Pinot Gris (Willamette Valley)
3                   NaN  St. Julian 2013 Reserve Late Harvest Riesling ...
4           @paulgwine   Sweet Cheeks 2012 Vintner's Reserve Wild Child...
5          @wineschach  Tandem 2011 Ars In Vitro Tempranillo-Merlot (N...
6          @kerinokeefe   Terre di Giurfo 2013 Belsito Frappato (Vittoria)
7            @vossroger                  Trimbach 2012 Gewurztraminer (Alsace)
8                   NaN  Heinz Eifel 2013 Shine Gewürztraminer (Rheinhe...
9            @vossroger  Jean-Baptiste Adam 2012 Les Natures Pinot Gris...


             variety              winery
0        White Blend             Nicosia
1    Portuguese Red  Quinta dos Avidagos
2         Pinot Gris            Rainstorm
3           Riesling          St. Julian
4         Pinot Noir        Sweet Cheeks
```

```
5   Tempranillo-Merlot                  Tandem
6            Frappato      Terre di Giurfo
7      Gewürztraminer            Trimbach
8      Gewürztraminer          Heinz Eifel
9          Pinot Gris   Jean-Baptiste Adam
```

Q2 - Select the `description` column from `reviews` and assign the result to the variable `desc`.

In [4]:
```python
desc = reviews['description']
desc
```

Out[4]:
```
0         Aromas include tropical fruit, broom, brimston...
1         This is ripe and fruity, a wine that is smooth...
2         Tart and snappy, the flavors of lime flesh and...
3         Pineapple rind, lemon pith and orange blossom ...
4         Much like the regular bottling from 2012, this...
                                ...
129966    Notes of honeysuckle and cantaloupe sweeten th...
129967    Citation is given as much as a decade of bottl...
129968    Well-drained gravel soil gives this wine its c...
129969    A dry style of Pinot Gris, this is crisp with ...
129970    Big, rich and off-dry, this is powered by inte...
Name: description, Length: 129971, dtype: object
```

Q3 - Select the first value from the description column of `reviews`, assigning it to variable `first_description`.

In [5]:
```python
first_description = desc[0]
first_description
```

Out[5]:
"Aromas include tropical fruit, broom, brimstone and dried herb. The palate isn't overly e
xpressive, offering unripened apple, citrus and dried sage alongside brisk acidity."

Q4 - Select the first row of data (the first record) from `reviews`, assigning it to the variable `first_row`.

In [6]:
```python
first_row = reviews.loc[[0]]
first_row
```

Out[6]:

	country	description	designation	points	price	province	region_1	region_2	taster_name	taster_twitter_handle
0	Italy	Aromas include tropical fruit, broom, brimston...	Vulkà Bianco	87	NaN	Sicily & Sardinia	Etna	NaN	Kerin O'Keefe	@kerinokeefe

Q5 - Select the first 10 values from the `description` column in `reviews`, assigning the result to variable `first_descriptions`.

In [7]:
```python
first_descriptions = desc.head(10)
print(first_descriptions)
```

```
0    Aromas include tropical fruit, broom, brimston...
1    This is ripe and fruity, a wine that is smooth...
2    Tart and snappy, the flavors of lime flesh and...
3    Pineapple rind, lemon pith and orange blossom ...
4    Much like the regular bottling from 2012, this...
5    Blackberry and raspberry aromas show a typical...
6    Here's a bright, informal red that opens with ...
7    This dry and restrained wine offers spice in p...
```

```
8    Savory dried thyme notes accent sunnier flavor...
9    This has great depth of flavor with its fresh ...
Name: description, dtype: object
```

Q6 - Select the records with index labels `1` , `2` , `3` , `5` , and `8` , assigning the result to the variable `sample_reviews` .

In [8]:
```python
sample_reviews = reviews.iloc[[1,3,5,8]]
print(sample_reviews)
```

```
     country                                        description  \
1   Portugal  This is ripe and fruity, a wine that is smooth...
3         US  Pineapple rind, lemon pith and orange blossom ...
5      Spain  Blackberry and raspberry aromas show a typical...
8    Germany  Savory dried thyme notes accent sunnier flavor...

            designation  points  price        province          region_1  \
1               Avidagos      87   15.0           Douro               NaN
3   Reserve Late Harvest      87   13.0        Michigan  Lake Michigan Shore
5           Ars In Vitro      87   15.0  Northern Spain           Navarra
8                  Shine      87   12.0     Rheinhessen               NaN

   region_2         taster_name taster_twitter_handle  \
1       NaN          Roger Voss            @vossroger
3       NaN   Alexander Peartree                   NaN
5       NaN    Michael Schachner          @wineschach
8       NaN    Anna Lee C. Iijima                  NaN

                                               title               variety  \
1       Quinta dos Avidagos 2011 Avidagos Red (Douro)        Portuguese Red
3   St. Julian 2013 Reserve Late Harvest Riesling ...             Riesling
5   Tandem 2011 Ars In Vitro Tempranillo-Merlot (N...  Tempranillo-Merlot
8   Heinz Eifel 2013 Shine Gewürztraminer (Rheinhe...        Gewürztraminer

                winery
1  Quinta dos Avidagos
3           St. Julian
5               Tandem
8          Heinz Eifel
```

Q7 - Create a variable `df` containing the `country` , `province` , `region_1` , and `region_2` columns of the records with the index labels `0` , `1` , `10` , and `100` .

In [9]:
```python
df = reviews.loc[[0,1,10,100], ['country', 'province', 'region_1', 'region_2']]
df
```

Out[9]:

	country	province	region_1	region_2
0	Italy	Sicily & Sardinia	Etna	NaN
1	Portugal	Douro	NaN	NaN
10	US	California	Napa Valley	Napa
100	US	New York	Finger Lakes	Finger Lakes

Q8 - Create a variable `df` containing the `country` and `variety` columns of the first 100 records.

In [10]:
```python
df = reviews.loc[0:99, ['country', 'variety']]
df
```

Out[10]:

	country	variety

	country	variety
0	Italy	White Blend
1	Portugal	Portuguese Red
2	US	Pinot Gris
3	US	Riesling
4	US	Pinot Noir
...	...	...
95	France	Gamay
96	France	Gamay
97	US	Riesling
98	Italy	Sangiovese
99	US	Bordeaux-style Red Blend

100 rows × 2 columns

Q9 - Create a DataFrame `italian_wines` containing reviews of wines made in `Italy`.

In [11]:
```python
italian_wines = reviews.loc[(reviews['country'] == "Italy")]
print(italian_wines)
```

```
        country                                        description  \
0         Italy  Aromas include tropical fruit, broom, brimston...
6         Italy  Here's a bright, informal red that opens with ...
13        Italy  This is dominated by oak and oak-driven aromas...
22        Italy  Delicate aromas recall white flower and citrus...
24        Italy  Aromas of prune, blackcurrant, toast and oak c...
...         ...                                                ...
129929    Italy  This luminous sparkler has a sweet, fruit-forw...
129943    Italy  A blend of Nero d'Avola and Syrah, this convey...
129947    Italy  A blend of 65% Cabernet Sauvignon, 30% Merlot ...
129961    Italy  Intense aromas of wild cherry, baking spice, t...
129962    Italy  Blackberry, cassis, grilled herb and toasted a...

                       designation  points  price            province  \
0                     Vulkà Bianco      87    NaN  Sicily & Sardinia
6                          Belsito      87   16.0  Sicily & Sardinia
13                           Rosso      87    NaN  Sicily & Sardinia
22                        Ficiligno      87   19.0  Sicily & Sardinia
24                            Aynat      87   35.0  Sicily & Sardinia
...                            ...     ...    ...                ...
129929                         NaN      91   38.0             Veneto
129943                     Adènzia      90   29.0  Sicily & Sardinia
129947                    Symposio      90   20.0  Sicily & Sardinia
129961                         NaN      90   30.0  Sicily & Sardinia
129962  Sàgana Tenuta San Giacomo      90   40.0  Sicily & Sardinia

                             region_1 region_2    taster_name  \
0                                 Etna      NaN  Kerin O'Keefe
6                             Vittoria      NaN  Kerin O'Keefe
13                                Etna      NaN  Kerin O'Keefe
22                             Sicilia      NaN  Kerin O'Keefe
24                             Sicilia      NaN  Kerin O'Keefe
...                                ...      ...            ...
129929  Prosecco Superiore di Cartizze      NaN            NaN
129943                         Sicilia      NaN  Kerin O'Keefe
```

```
        129947            Terre Siciliane    NaN  Kerin O'Keefe
        129961                  Sicilia      NaN  Kerin O'Keefe
        129962                  Sicilia      NaN  Kerin O'Keefe

                 taster_twitter_handle  \
        0                   @kerinokeefe
        6                   @kerinokeefe
        13                  @kerinokeefe
        22                  @kerinokeefe
        24                  @kerinokeefe
        ...                          ...
        129929                       NaN
        129943              @kerinokeefe
        129947              @kerinokeefe
        129961              @kerinokeefe
        129962              @kerinokeefe

                                                    title            variety  \
        0                 Nicosia 2013 Vulkà Bianco  (Etna)         White Blend
        6        Terre di Giurfo 2013 Belsito Frappato (Vittoria)     Frappato
        13               Masseria Setteporte 2012 Rosso  (Etna)  Nerello Mascalese
        22       Baglio di Pianetto 2007 Ficiligno White (Sicilia)   White Blend
        24          Canicattì 2009 Aynat Nero d'Avola (Sicilia)    Nero d'Avola
        ...                                                  ...            ...
        129929  Col Vetoraz Spumanti NV  Prosecco Superiore di...     Prosecco
        129943  Baglio del Cristo di Campobello 2012 Adènzia R...    Red Blend
        129947  Feudo Principi di Butera 2012 Symposio Red (Te...    Red Blend
        129961                   COS 2013 Frappato (Sicilia)         Frappato
        129962  Cusumano 2012 Sàgana Tenuta San Giacomo Nero d...  Nero d'Avola

                                    winery
        0                          Nicosia
        6                   Terre di Giurfo
        13              Masseria Setteporte
        22               Baglio di Pianetto
        24                        Canicattì
        ...                           ...
        129929             Col Vetoraz Spumanti
        129943  Baglio del Cristo di Campobello
        129947          Feudo Principi di Butera
        129961                           COS
        129962                      Cusumano

        [19540 rows x 13 columns]

In [ ]:
```