Begin With Importing Necessary Packages

In [8]:

```
import requests
from bs4 import BeautifulSoup
```

In [9]:

```
# go to the billboard 2019 hit pop songs page - copy the URL into the code

url = "https://www.jetpunk.com/user-quizzes/139806/lonely-planets-top-ten-countries-by-ye
ar"
response = requests.get(url)
```

In [10]:

```
#Let's be sure we got back a good response
page = requests.get(url)
print(page)
```

```
<Response [200]>
```

In [11]:

```
page_content = BeautifulSoup(response.text, 'html.parser') # creates a parse tree that ca
n be used to extract data from HTML
```

List of Website Responses

https://developer.mozilla.org/en-US/docs/Web/HTTP/Status

Let's See What is In Our HTML Document

In [12]:

```
page_content.text
block_holders = page_content.select("table td.block-holder") # Use CSS Selectors in here
```

In [13]:

```
final = []

for block in block_holders: # Iterate through each block holder
    rows = block.select("tr")

    year = rows.pop(0) # first year in block
    year = year.text.strip()

    for i in range(10): # Ten values in a row
        rowValues = rows.pop(0)
        values = rowValues.select("td")
        number = values[0].text.strip()
        country = values[1].text.strip()

        final.append([year, number, country])

    rows.pop(0) # get rid of the empty row between two tables

    # repeat the same process
    year = rows.pop(0)
    year = year.text.strip()
```

```
    for i in range(10):
        rowValues = rows.pop(0)
        values = rowValues.select("td")
        number = values[0].text.strip()
        country = values[1].text.strip()

        final.append([year, number, country])

print(final)
```

```
[['2019', '1', 'Sri Lanka'], ['2019', '2', 'Germany'], ['2019', '3', 'Zimbabwe'], ['2019'
, '4', 'Panama'], ['2019', '5', 'Kyrgyzstan'], ['2019', '6', 'Jordan'], ['2019', '7', 'In
donesia'], ['2019', '8', 'Belarus'], ['2019', '9', 'São Tomé'], ['2019', '10', 'Belize'],
['2018', '1', 'Chile'], ['2018', '2', 'South Korea'], ['2018', '3', 'Portugal'], ['2018',
'4', 'Djibouti'], ['2018', '5', 'New Zealand'], ['2018', '6', 'Malta'], ['2018', '7', 'Ge
orgia'], ['2018', '8', 'Mauritius'], ['2018', '9', 'China'], ['2018', '10', 'South Africa
'], ['2017', '1', 'Canada'], ['2017', '2', 'Colombia'], ['2017', '3', 'Finland'], ['2017'
, '4', 'Dominica'], ['2017', '5', 'Nepal'], ['2017', '6', 'Bermuda'], ['2017', '7', 'Mong
olia'], ['2017', '8', 'Oman'], ['2017', '9', 'Myanmar'], ['2017', '10', 'Ethiopia'], ['20
16', '1', 'Botswana'], ['2016', '2', 'Japan'], ['2016', '3', 'United States'], ['2016', '
4', 'Palau'], ['2016', '5', 'Latvia'], ['2016', '6', 'Australia'], ['2016', '7', 'Poland'
], ['2016', '8', 'Uruguay'], ['2016', '9', 'Greenland'], ['2016', '10', 'Fiji'], ['2015',
'1', 'Singapore'], ['2015', '2', 'Namibia'], ['2015', '3', 'Lithuania'], ['2015', '4', 'N
icaragua'], ['2015', '5', 'Ireland'], ['2015', '6', 'R. Congo'], ['2015', '7', 'Serbia'],
['2015', '8', 'Philippines'], ['2015', '9', 'St. Lucia'], ['2015', '10', 'Morocco'], ['20
14', '1', 'Brazil'], ['2014', '2', 'Antarctica'], ['2014', '3', 'Scotland'], ['2014', '4'
, 'Sweden'], ['2014', '5', 'Malawi'], ['2014', '6', 'Mexico'], ['2014', '7', 'Seychelles'
], ['2014', '8', 'Belgium'], ['2014', '9', 'Macedonia'], ['2014', '10', 'Malaysia'], ['20
13', '1', 'Sri Lanka'], ['2013', '2', 'Montenegro'], ['2013', '3', 'South Korea'], ['2013
', '4', 'Ecuador'], ['2013', '5', 'Slovakia'], ['2013', '6', 'Solomon Islands'], ['2013',
'7', 'Iceland'], ['2013', '8', 'Turkey'], ['2013', '9', 'Dominican Rep.'], ['2013', '10',
'Madagascar'], ['2012', '1', 'Uganda'], ['2012', '2', 'Myanmar'], ['2012', '3', 'Ukraine'
], ['2012', '4', 'Jordan'], ['2012', '5', 'Denmark'], ['2012', '6', 'Bhutan'], ['2012', '
7', 'Cuba'], ['2012', '8', 'New Caledonia'], ['2012', '9', 'Taiwan'], ['2012', '10', 'Swi
tzerland'], ['2011', '1', 'Albania'], ['2011', '2', 'Brazil'], ['2011', '3', 'Cape Verde'
], ['2011', '4', 'Panama'], ['2011', '5', 'Bulgaria'], ['2011', '6', 'Vanuatu'], ['2011',
'7', 'Italy'], ['2011', '8', 'Tanzania'], ['2011', '9', 'Japan'], ['2011', '10', 'none'],
['2010', '1', 'El Salvador'], ['2010', '2', 'Germany'], ['2010', '3', 'Greece'], ['2010',
'4', 'Malaysia'], ['2010', '5', 'Morocco'], ['2010', '6', 'Nepal'], ['2010', '7', 'New Ze
aland'], ['2010', '8', 'Portugal'], ['2010', '9', 'Suriname'], ['2010', '10', 'United Sta
tes']]
```

In [14]:

```
import csv

with open('countries.csv', 'w', newline='') as file:
    writer = csv.writer(file)
    writer.writerow(["year", "number", "country"])

    for values in final:
        writer.writerow(values)
```