

education degree, mobility status, after tax income, scarp

November 22, 2024

1 Simple Webscraping Example with BeautifulSoup

```
[6]: # Import all neccessary libraries
```

```
from bs4 import BeautifulSoup
import urllib.request
import pandas as pd
```

```
[7]: url = "https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/
      ↳page.cfm?
      ↳Lang=E&SearchText=M1E&DGUIDlist=2021A0011M1E&GENDERlist=1,2,3&STATISTIClist=1,4&HEADERlist=
```

```
[8]: # Assign the URL to a variable
```

```
url = "https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/
      ↳page.cfm?
      ↳Lang=E&SearchText=M1C&DGUIDlist=2021A0011M1C&GENDERlist=1,2,3&STATISTIClist=1,4&HEADERlist=
```

```
# use the urlopen function to open the webpage
html = urllib.request.urlopen(url)
```

```
# show object html
html
```

```
[8]: <http.client.HTTPResponse at 0x7f090d79ec20>
```

```
[9]: # Create the BeautifulSoup object
```

```
html_to_parse = BeautifulSoup(html, "html.parser")
```

```
[10]: # create a list of tables. There is only 1 table in this webpage
```

```
tables = html_to_parse.find_all("table")
print(f"Number of tables found: {len(tables)}")
```

Number of tables found: 1

```
[11]: # Create list of all the <th> tags in the table that has the title
      ↪ "2021A0011M1C - Population, 2021 - Counts - Total"

      td = tables[0].find(attrs={"title": "2021A0011M1C - Population, 2021 - Counts - 
      ↪ Total"})

[12]: td

[12]: <td class="text-right text-nowrap" headers="rh1 r1 geo2021A0011M1C
      geo2021A0011M1Cstat1 geo2021A0011M1Cstat1gen1" title="2021A0011M1C - Population,
      2021 - Counts - Total"> 35,642</td>

[13]: # convert to float
      float(td.text.replace(",", ""))

[13]: 35642.0
```

1.1 Create a script that will look up from a list of Postal codes

```
[14]: import urllib.parse as urlparse
      from urllib.parse import urlencode
      import pandas as pd

[15]: df = pd.read_csv('Toronto_Neighborhoods_with_Coordinates.csv')
      df.head()
```

	Postalcode	Borough	Neighborhood \
0	M1B	Scarborough	Malvern / Rouge
1	M1C	Scarborough	Rouge Hill / Port Union / Highland Creek
2	M1E	Scarborough	Guildwood / Morningside / West Hill
3	M1G	Scarborough	Woburn
4	M1H	Scarborough	Cedarbrae

	Latitude	Longitude
0	43.806686	-79.194353
1	43.784535	-79.160497
2	43.763573	-79.188711
3	43.770992	-79.216917
4	43.773136	-79.239476

```
[16]: # A list of postal code from the previous part

      postal = df['Postalcode']
      postal
```

```
[16]: 0      M1B
      1      M1C
      2      M1E
      3      M1G
      4      M1H
      ...
      98     M9N
      99     M9P
      100    M9R
      101    M9V
      102    M9W
      Name: Postalcode, Length: 103, dtype: object
```

```
[17]: # Creating Empty DataFrame and Storing it in variable df

df = pd.DataFrame(columns = ['postal_code', 'data', 'value'])
df
```

```
[17]: Empty DataFrame
      Columns: [postal_code, data, value]
      Index: []
```

```
[18]: df1 = pd.DataFrame(columns = ['postal_code', 'data', 'value'])
      df1
```

```
[18]: Empty DataFrame
      Columns: [postal_code, data, value]
      Index: []
```

```
[19]: df2 = pd.DataFrame(columns = ['postal_code', 'data', 'value'])
      df2
```

```
[19]: Empty DataFrame
      Columns: [postal_code, data, value]
      Index: []
```

```
[14]: # Loop through each postal code
      # median after tax income
      for i in postal:
          url = "https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/
              ↪details/page.cfm?Lang=E"
          params = {
              'SearchText': i,
              'DGUIDlist': '2021A0011'+i
          }

      # this part switches up the postal code parameter in the url
```

```

url_parts = list(urlparse.urlparse(url))
query = dict(urlparse.parse_qs(url_parts[4]))
query.update(params)

url_parts[4] = urlencode(query)
query = urlparse.urlunparse(url_parts)

# the following code is similar to the above
html = urllib.request.urlopen(query)
html_to_parse = BeautifulSoup(html, "html.parser")
tables = html_to_parse.find_all("table")
print(f"Number of tables found: {len(tables)}")
if len(tables) == 0:
    print(f"No tables starts with this postal code: {query}. Skipping...")#
↪no table under this postal code
else:
    title = (f"2021A0011{i} - Median after-tax income in 2020 among
↪recipients ($) - Counts - Total")
    td = tables[0].find(attrs={"title": title})
    print(td)
    if td and td.text.strip():
        print(f"Processing value('median after tax income'): {td.text}")
        try:
            value = float(td.text.replace(",", "").strip()) #convert string to
↪the float
        except ValueError:
            # cannot convert, assign it to zero
            print(f"Non-numeric value encountered: {td.text}. Assigning default
↪value 0.")
            value = 0.0
        else:
            # cannot find, assign it to zero
            print(f"Skipping: No valid data found for title '{title}'. Assigning
↪default value 0.")
            value = 0.0
    df.loc[len(df.index)] = [i, title, value]

```

Number of tables found: 1

```

<td class="text-right text-nowrap" headers="rh7 r115 geo2021A0011M1B
geo2021A0011M1Bstat1 geo2021A0011M1Bstat1gen1" title="2021A0011M1B - Median
after-tax income in 2020 among recipients ($) - Counts - Total"> 31,600</td>
Processing value('median after tax income'): 31,600

```

Number of tables found: 1

```

<td class="text-right text-nowrap" headers="rh7 r115 geo2021A0011M1C
geo2021A0011M1Cstat1 geo2021A0011M1Cstat1gen1" title="2021A0011M1C - Median
after-tax income in 2020 among recipients ($) - Counts - Total"> 39,600</td>
Processing value('median after tax income'): 39,600

```

Number of tables found: 1

```
<td class="text-right text-nowrap" headers="rh7 r115 geo2021A0011M1E
geo2021A0011M1Estat1 geo2021A0011M1Estat1gen1" title="2021A0011M1E - Median
after-tax income in 2020 among recipients ($) - Counts - Total"> 32,800</td>
Processing value('median after tax income'): 32,800
```

Number of tables found: 1

```
<td class="text-right text-nowrap" headers="rh7 r115 geo2021A0011M1G
geo2021A0011M1Gstat1 geo2021A0011M1Gstat1gen1" title="2021A0011M1G - Median
after-tax income in 2020 among recipients ($) - Counts - Total"> 29,200</td>
Processing value('median after tax income'): 29,200
```

```
-----
KeyboardInterrupt                                Traceback (most recent call last)
Cell In[14], line 20
    18 # the following code is similar to the above
    19 html = urllib.request.urlopen(query)
----> 20 html_to_parse = BeautifulSoup(html, "html.parser")
    21 tables = html_to_parse.find_all("table")
    22 print(f"Number of tables found: {len(tables)}")

File /opt/conda/lib/python3.11/site-packages/bs4/__init__.py:335, in
↳ BeautifulSoup.__init__(self, markup, features, builder, parse_only,
↳ from_encoding, exclude_encodings, element_classes, **kwargs)
    333 self.builder.initialize_soup(self)
    334 try:
--> 335     self._feed()
    336     success = True
    337     break

File /opt/conda/lib/python3.11/site-packages/bs4/__init__.py:478, in
↳ BeautifulSoup._feed(self)
    475 # Convert the document to Unicode.
    476 self.builder.reset()
--> 478 self.builder.feed(self.markup)
    479 # Close out any unfinished strings and close all the open tags.
    480 self.endData()

File /opt/conda/lib/python3.11/site-packages/bs4/builder/_htmlparser.py:380, in
↳ HTMLParserTreeBuilder.feed(self, markup)
    378 parser.soup = self.soup
    379 try:
--> 380     parser.feed(markup)
    381 except AssertionError as e:
    382     # html.parser raises AssertionError in rare cases to
    383     # indicate a fatal problem with the markup, especially
    384     # when there's an error in the doctype declaration.
    385     raise ParserRejectedMarkup(e)
```

```

File /opt/conda/lib/python3.11/html/parser.py:110, in HTMLParser.feed(self, data)
    104 r"""Feed data to the parser.
    105
    106 Call this as often as you want, with as little or as much text
    107 as you want (may include '\n').
    108 """
    109 self.rawdata = self.rawdata + data
--> 110 self.goahead(0)

File /opt/conda/lib/python3.11/html/parser.py:170, in HTMLParser.goahead(self,
↳end)
    168 if startswith('<', i):
    169     if starttagopen.match(rawdata, i): # < + letter
--> 170         k = self.parse_starttag(i)
    171     elif startswith("</", i):
    172         k = self.parse_endtag(i)

File /opt/conda/lib/python3.11/html/parser.py:337, in HTMLParser.
↳parse_starttag(self, i)
    335     self.handle_startendtag(tag, attrs)
    336 else:
--> 337     self.handle_starttag(tag, attrs)
    338     if tag in self.CDATA_CONTENT_ELEMENTS:
    339         self.set_cdata_mode(tag)

File /opt/conda/lib/python3.11/site-packages/bs4/builder/_htmlparser.py:136, in
↳BeautifulSoupHTMLParser.handle_starttag(self, name, attrs,
↳handle_empty_element)
    134     attrvalue = ''
    135     #print("START", name)
--> 136     sourceline, sourcepos = self.getpos()
    137     tag = self.soup.handle_starttag(
    138         name, None, None, attr_dict, sourceline=sourceline,
    139         sourcepos=sourcepos
    140     )
    141     if tag and tag.is_empty_element and handle_empty_element:
    142         # Unlike other parsers, html.parser doesn't send separate end tag
    143         # events for empty-element tags. (It's handled in
    (...)
    149         # don't want handle_endtag() to cross off any previous end
    150         # events for tags of this name.

File /opt/conda/lib/python3.11/_markupbase.py:36, in ParserBase.getpos(self)
    33     self.lineno = 1
    34     self.offset = 0
---> 36 def getpos(self):
    37     """Return current line number and offset."""
    38     return self.lineno, self.offset

```

KeyboardInterrupt:

```
[15]: #Bachelor's degree or higher
for i in postal:
    url = "https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/
↳details/page.cfm?Lang=E"
    params = {
        'SearchText': i,
        'DGUIDlist': '2021A0011'+i
    }

    # this part switches up the postal code parameter in the url
    url_parts = list(urlparse.urlparse(url))
    query = dict(urlparse.parse_qs(url_parts[4]))
    query.update(params)

    url_parts[4] = urlencode(query)
    query = urlparse.urlunparse(url_parts)

    # the following code is similar to the above
    html = urllib.request.urlopen(query)
    html_to_parse = BeautifulSoup(html, "html.parser")
    tables = html_to_parse.find_all("table")
    print(f"Number of tables found: {len(tables)}")
    if len(tables) == 0:
        print(f"No tables starts with this postal code: {query}. Skipping...")#
↳no table under this postal code
    else:
        title = (f"2021A0011{i} - Bachelor's degree or higher - Counts - Total")
        td = tables[0].find(attrs={"title": title})
        print(td)
        if td and td.text.strip():
            print(f"Processing value('Bachelor's degree or higher): {td.text}")
            try:
                value = float(td.text.replace(",", "").strip()) #convert string to
↳the float
            except ValueError:
                # cannot convert, assign it to zero
                print(f"Non-numeric value encountered: {td.text}. Assigning default
↳value 0.")
                value = 0.0
            else:
                # cannot find, assign it to zero
                print(f"Skipping: No valid data found for title '{title}'. Assigning
↳default value 0.")
```

```
value = 0.0
df1.loc[len(df1.index)] = [i, title, value]
```

Number of tables found: 1

```
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1B
geo2021A0011M1Bstat1 geo2021A0011M1Bstat1gen1" title="2021A0011M1B - Bachelor's
degree or higher - Counts - Total"> 14,160</td>
```

Processing value('Bachelor's degree or higher): 14,160

Number of tables found: 1

```
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1C
geo2021A0011M1Cstat1 geo2021A0011M1Cstat1gen1" title="2021A0011M1C - Bachelor's
degree or higher - Counts - Total"> 11,150</td>
```

Processing value('Bachelor's degree or higher): 11,150

Number of tables found: 1

```
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1E
geo2021A0011M1Estat1 geo2021A0011M1Estat1gen1" title="2021A0011M1E - Bachelor's
degree or higher - Counts - Total"> 11,120</td>
```

Processing value('Bachelor's degree or higher): 11,120

Number of tables found: 1

```
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1G
geo2021A0011M1Gstat1 geo2021A0011M1Gstat1gen1" title="2021A0011M1G - Bachelor's
degree or higher - Counts - Total"> 6,770</td>
```

Processing value('Bachelor's degree or higher): 6,770

Number of tables found: 1

```
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1H
geo2021A0011M1Hstat1 geo2021A0011M1Hstat1gen1" title="2021A0011M1H - Bachelor's
degree or higher - Counts - Total"> 6,895</td>
```

Processing value('Bachelor's degree or higher): 6,895

Number of tables found: 1

```
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1J
geo2021A0011M1Jstat1 geo2021A0011M1Jstat1gen1" title="2021A0011M1J - Bachelor's
degree or higher - Counts - Total"> 7,690</td>
```

Processing value('Bachelor's degree or higher): 7,690

Number of tables found: 1

```
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1K
geo2021A0011M1Kstat1 geo2021A0011M1Kstat1gen1" title="2021A0011M1K - Bachelor's
degree or higher - Counts - Total"> 10,665</td>
```

Processing value('Bachelor's degree or higher): 10,665

Number of tables found: 1

```
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1L
geo2021A0011M1Lstat1 geo2021A0011M1Lstat1gen1" title="2021A0011M1L - Bachelor's
degree or higher - Counts - Total"> 9,660</td>
```

Processing value('Bachelor's degree or higher): 9,660

Number of tables found: 1

```
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1M
geo2021A0011M1Mstat1 geo2021A0011M1Mstat1gen1" title="2021A0011M1M - Bachelor's
degree or higher - Counts - Total"> 6,700</td>
```


Processing value('Bachelor's degree or higher): 6,700
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1N
geo2021A0011M1Nstat1 geo2021A0011M1Nstat1gen1" title="2021A0011M1N - Bachelor's
degree or higher - Counts - Total"> 6,805</td>
Processing value('Bachelor's degree or higher): 6,805
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1P
geo2021A0011M1Pstat1 geo2021A0011M1Pstat1gen1" title="2021A0011M1P - Bachelor's
degree or higher - Counts - Total"> 11,585</td>
Processing value('Bachelor's degree or higher): 11,585
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1R
geo2021A0011M1Rstat1 geo2021A0011M1Rstat1gen1" title="2021A0011M1R - Bachelor's
degree or higher - Counts - Total"> 7,100</td>
Processing value('Bachelor's degree or higher): 7,100
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1S
geo2021A0011M1Sstat1 geo2021A0011M1Sstat1gen1" title="2021A0011M1S - Bachelor's
degree or higher - Counts - Total"> 10,320</td>
Processing value('Bachelor's degree or higher): 10,320
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1T
geo2021A0011M1Tstat1 geo2021A0011M1Tstat1gen1" title="2021A0011M1T - Bachelor's
degree or higher - Counts - Total"> 9,635</td>
Processing value('Bachelor's degree or higher): 9,635
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1V
geo2021A0011M1Vstat1 geo2021A0011M1Vstat1gen1" title="2021A0011M1V - Bachelor's
degree or higher - Counts - Total"> 10,700</td>
Processing value('Bachelor's degree or higher): 10,700
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1W
geo2021A0011M1Wstat1 geo2021A0011M1Wstat1gen1" title="2021A0011M1W - Bachelor's
degree or higher - Counts - Total"> 13,180</td>
Processing value('Bachelor's degree or higher): 13,180
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M1X
geo2021A0011M1Xstat1 geo2021A0011M1Xstat1gen1" title="2021A0011M1X - Bachelor's
degree or higher - Counts - Total"> 3,145</td>
Processing value('Bachelor's degree or higher): 3,145
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M2H
geo2021A0011M2Hstat1 geo2021A0011M2Hstat1gen1" title="2021A0011M2H - Bachelor's
degree or higher - Counts - Total"> 9,520</td>
Processing value('Bachelor's degree or higher): 9,520
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M2J

geo2021A0011M2Jstat1 geo2021A0011M2Jstat1gen1" title="2021A0011M2J - Bachelor's degree or higher - Counts - Total"> 24,985</td>
 Processing value('Bachelor's degree or higher): 24,985
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M2K geo2021A0011M2Kstat1 geo2021A0011M2Kstat1gen1" title="2021A0011M2K - Bachelor's degree or higher - Counts - Total"> 13,120</td>
 Processing value('Bachelor's degree or higher): 13,120
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M2L geo2021A0011M2Lstat1 geo2021A0011M2Lstat1gen1" title="2021A0011M2L - Bachelor's degree or higher - Counts - Total"> 5,250</td>
 Processing value('Bachelor's degree or higher): 5,250
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M2M geo2021A0011M2Mstat1 geo2021A0011M2Mstat1gen1" title="2021A0011M2M - Bachelor's degree or higher - Counts - Total"> 13,715</td>
 Processing value('Bachelor's degree or higher): 13,715
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M2N geo2021A0011M2Nstat1 geo2021A0011M2Nstat1gen1" title="2021A0011M2N - Bachelor's degree or higher - Counts - Total"> 39,350</td>
 Processing value('Bachelor's degree or higher): 39,350
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M2P geo2021A0011M2Pstat1 geo2021A0011M2Pstat1gen1" title="2021A0011M2P - Bachelor's degree or higher - Counts - Total"> 3,810</td>
 Processing value('Bachelor's degree or higher): 3,810
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M2R geo2021A0011M2Rstat1 geo2021A0011M2Rstat1gen1" title="2021A0011M2R - Bachelor's degree or higher - Counts - Total"> 13,725</td>
 Processing value('Bachelor's degree or higher): 13,725
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M3A geo2021A0011M3Astat1 geo2021A0011M3Astat1gen1" title="2021A0011M3A - Bachelor's degree or higher - Counts - Total"> 10,585</td>
 Processing value('Bachelor's degree or higher): 10,585
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M3B geo2021A0011M3Bstat1 geo2021A0011M3Bstat1gen1" title="2021A0011M3B - Bachelor's degree or higher - Counts - Total"> 6,135</td>
 Processing value('Bachelor's degree or higher): 6,135
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M3C geo2021A0011M3Cstat1 geo2021A0011M3Cstat1gen1" title="2021A0011M3C - Bachelor's degree or higher - Counts - Total"> 12,370</td>
 Processing value('Bachelor's degree or higher): 12,370

Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M3H
geo2021A0011M3Hstat1 geo2021A0011M3Hstat1gen1" title="2021A0011M3H - Bachelor's
degree or higher - Counts - Total"> 13,965</td>
Processing value('Bachelor's degree or higher): 13,965
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M3J
geo2021A0011M3Jstat1 geo2021A0011M3Jstat1gen1" title="2021A0011M3J - Bachelor's
degree or higher - Counts - Total"> 6,315</td>
Processing value('Bachelor's degree or higher): 6,315
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M3K
geo2021A0011M3Kstat1 geo2021A0011M3Kstat1gen1" title="2021A0011M3K - Bachelor's
degree or higher - Counts - Total"> 1,965</td>
Processing value('Bachelor's degree or higher): 1,965
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M3L
geo2021A0011M3Lstat1 geo2021A0011M3Lstat1gen1" title="2021A0011M3L - Bachelor's
degree or higher - Counts - Total"> 2,380</td>
Processing value('Bachelor's degree or higher): 2,380
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M3M
geo2021A0011M3Mstat1 geo2021A0011M3Mstat1gen1" title="2021A0011M3M - Bachelor's
degree or higher - Counts - Total"> 3,975</td>
Processing value('Bachelor's degree or higher): 3,975
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M3N
geo2021A0011M3Nstat1 geo2021A0011M3Nstat1gen1" title="2021A0011M3N - Bachelor's
degree or higher - Counts - Total"> 3,855</td>
Processing value('Bachelor's degree or higher): 3,855
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4A
geo2021A0011M4Astat1 geo2021A0011M4Astat1gen1" title="2021A0011M4A - Bachelor's
degree or higher - Counts - Total"> 3,545</td>
Processing value('Bachelor's degree or higher): 3,545
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4B
geo2021A0011M4Bstat1 geo2021A0011M4Bstat1gen1" title="2021A0011M4B - Bachelor's
degree or higher - Counts - Total"> 4,395</td>
Processing value('Bachelor's degree or higher): 4,395
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4C
geo2021A0011M4Cstat1 geo2021A0011M4Cstat1gen1" title="2021A0011M4C - Bachelor's
degree or higher - Counts - Total"> 15,735</td>
Processing value('Bachelor's degree or higher): 15,735
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4E
geo2021A0011M4Estat1 geo2021A0011M4Estat1gen1" title="2021A0011M4E - Bachelor's

degree or higher - Counts - Total"> 11,150</td>
Processing value('Bachelor's degree or higher): 11,150
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4G
geo2021A0011M4Gstat1 geo2021A0011M4Gstat1gen1" title="2021A0011M4G - Bachelor's
degree or higher - Counts - Total"> 9,715</td>
Processing value('Bachelor's degree or higher): 9,715
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4H
geo2021A0011M4Hstat1 geo2021A0011M4Hstat1gen1" title="2021A0011M4H - Bachelor's
degree or higher - Counts - Total"> 4,280</td>
Processing value('Bachelor's degree or higher): 4,280
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4J
geo2021A0011M4Jstat1 geo2021A0011M4Jstat1gen1" title="2021A0011M4J - Bachelor's
degree or higher - Counts - Total"> 12,370</td>
Processing value('Bachelor's degree or higher): 12,370
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4K
geo2021A0011M4Kstat1 geo2021A0011M4Kstat1gen1" title="2021A0011M4K - Bachelor's
degree or higher - Counts - Total"> 12,900</td>
Processing value('Bachelor's degree or higher): 12,900
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4L
geo2021A0011M4Lstat1 geo2021A0011M4Lstat1gen1" title="2021A0011M4L - Bachelor's
degree or higher - Counts - Total"> 12,225</td>
Processing value('Bachelor's degree or higher): 12,225
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4M
geo2021A0011M4Mstat1 geo2021A0011M4Mstat1gen1" title="2021A0011M4M - Bachelor's
degree or higher - Counts - Total"> 10,395</td>
Processing value('Bachelor's degree or higher): 10,395
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4N
geo2021A0011M4Nstat1 geo2021A0011M4Nstat1gen1" title="2021A0011M4N - Bachelor's
degree or higher - Counts - Total"> 8,035</td>
Processing value('Bachelor's degree or higher): 8,035
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4P
geo2021A0011M4Pstat1 geo2021A0011M4Pstat1gen1" title="2021A0011M4P - Bachelor's
degree or higher - Counts - Total"> 13,115</td>
Processing value('Bachelor's degree or higher): 13,115
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4R
geo2021A0011M4Rstat1 geo2021A0011M4Rstat1gen1" title="2021A0011M4R - Bachelor's
degree or higher - Counts - Total"> 6,335</td>
Processing value('Bachelor's degree or higher): 6,335
Number of tables found: 1

<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4S
 geo2021A0011M4Sstat1 geo2021A0011M4Sstat1gen1" title="2021A0011M4S - Bachelor's
 degree or higher - Counts - Total"> 16,940</td>
 Processing value('Bachelor's degree or higher): 16,940
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4T
 geo2021A0011M4Tstat1 geo2021A0011M4Tstat1gen1" title="2021A0011M4T - Bachelor's
 degree or higher - Counts - Total"> 5,880</td>
 Processing value('Bachelor's degree or higher): 5,880
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4V
 geo2021A0011M4Vstat1 geo2021A0011M4Vstat1gen1" title="2021A0011M4V - Bachelor's
 degree or higher - Counts - Total"> 10,760</td>
 Processing value('Bachelor's degree or higher): 10,760
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4W
 geo2021A0011M4Wstat1 geo2021A0011M4Wstat1gen1" title="2021A0011M4W - Bachelor's
 degree or higher - Counts - Total"> 9,360</td>
 Processing value('Bachelor's degree or higher): 9,360
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4X
 geo2021A0011M4Xstat1 geo2021A0011M4Xstat1gen1" title="2021A0011M4X - Bachelor's
 degree or higher - Counts - Total"> 7,175</td>
 Processing value('Bachelor's degree or higher): 7,175
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M4Y
 geo2021A0011M4Ystat1 geo2021A0011M4Ystat1gen1" title="2021A0011M4Y - Bachelor's
 degree or higher - Counts - Total"> 20,815</td>
 Processing value('Bachelor's degree or higher): 20,815
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M5A
 geo2021A0011M5Astat1 geo2021A0011M5Astat1gen1" title="2021A0011M5A - Bachelor's
 degree or higher - Counts - Total"> 21,690</td>
 Processing value('Bachelor's degree or higher): 21,690
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M5B
 geo2021A0011M5Bstat1 geo2021A0011M5Bstat1gen1" title="2021A0011M5B - Bachelor's
 degree or higher - Counts - Total"> 9,925</td>
 Processing value('Bachelor's degree or higher): 9,925
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M5C
 geo2021A0011M5Cstat1 geo2021A0011M5Cstat1gen1" title="2021A0011M5C - Bachelor's
 degree or higher - Counts - Total"> 1,770</td>
 Processing value('Bachelor's degree or higher): 1,770
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M5E
 geo2021A0011M5Estat1 geo2021A0011M5Estat1gen1" title="2021A0011M5E - Bachelor's
 degree or higher - Counts - Total"> 8,005</td>

Processing value('Bachelor's degree or higher): 8,005
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M5G
geo2021A0011M5Gstat1 geo2021A0011M5Gstat1gen1" title="2021A0011M5G - Bachelor's
degree or higher - Counts - Total"> 6,220</td>
Processing value('Bachelor's degree or higher): 6,220
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M5H
geo2021A0011M5Hstat1 geo2021A0011M5Hstat1gen1" title="2021A0011M5H - Bachelor's
degree or higher - Counts - Total"> 2,270</td>
Processing value('Bachelor's degree or higher): 2,270
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M5J
geo2021A0011M5Jstat1 geo2021A0011M5Jstat1gen1" title="2021A0011M5J - Bachelor's
degree or higher - Counts - Total"> 11,410</td>
Processing value('Bachelor's degree or higher): 11,410
Number of tables found: 0
No tables starts with this postal code: <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=M5K&DGUIDlist=2021A0011M5K>.
Skipping...
Processing value('Bachelor's degree or higher): 11,410
Number of tables found: 0
No tables starts with this postal code: <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=M5L&DGUIDlist=2021A0011M5L>.
Skipping...
Processing value('Bachelor's degree or higher): 11,410
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M5M
geo2021A0011M5Mstat1 geo2021A0011M5Mstat1gen1" title="2021A0011M5M - Bachelor's
degree or higher - Counts - Total"> 12,470</td>
Processing value('Bachelor's degree or higher): 12,470
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M5N
geo2021A0011M5Nstat1 geo2021A0011M5Nstat1gen1" title="2021A0011M5N - Bachelor's
degree or higher - Counts - Total"> 7,380</td>
Processing value('Bachelor's degree or higher): 7,380
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M5P
geo2021A0011M5Pstat1 geo2021A0011M5Pstat1gen1" title="2021A0011M5P - Bachelor's
degree or higher - Counts - Total"> 10,595</td>
Processing value('Bachelor's degree or higher): 10,595
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M5R
geo2021A0011M5Rstat1 geo2021A0011M5Rstat1gen1" title="2021A0011M5R - Bachelor's
degree or higher - Counts - Total"> 14,920</td>
Processing value('Bachelor's degree or higher): 14,920

Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M5S
geo2021A0011M5Sstat1 geo2021A0011M5Sstat1gen1" title="2021A0011M5S - Bachelor's
degree or higher - Counts - Total"> 9,500</td>
Processing value('Bachelor's degree or higher): 9,500
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M5T
geo2021A0011M5Tstat1 geo2021A0011M5Tstat1gen1" title="2021A0011M5T - Bachelor's
degree or higher - Counts - Total"> 7,275</td>
Processing value('Bachelor's degree or higher): 7,275
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M5V
geo2021A0011M5Vstat1 geo2021A0011M5Vstat1gen1" title="2021A0011M5V - Bachelor's
degree or higher - Counts - Total"> 39,245</td>
Processing value('Bachelor's degree or higher): 39,245
Number of tables found: 0
No tables starts with this postal code: <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=M5W&DGUIDlist=2021A0011M5W>.
Skipping...
Processing value('Bachelor's degree or higher): 39,245
Number of tables found: 0
No tables starts with this postal code: <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=M5X&DGUIDlist=2021A0011M5X>.
Skipping...
Processing value('Bachelor's degree or higher): 39,245
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M6A
geo2021A0011M6Astat1 geo2021A0011M6Astat1gen1" title="2021A0011M6A - Bachelor's
degree or higher - Counts - Total"> 6,430</td>
Processing value('Bachelor's degree or higher): 6,430
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M6B
geo2021A0011M6Bstat1 geo2021A0011M6Bstat1gen1" title="2021A0011M6B - Bachelor's
degree or higher - Counts - Total"> 8,685</td>
Processing value('Bachelor's degree or higher): 8,685
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M6C
geo2021A0011M6Cstat1 geo2021A0011M6Cstat1gen1" title="2021A0011M6C - Bachelor's
degree or higher - Counts - Total"> 10,060</td>
Processing value('Bachelor's degree or higher): 10,060
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M6E
geo2021A0011M6Estat1 geo2021A0011M6Estat1gen1" title="2021A0011M6E - Bachelor's
degree or higher - Counts - Total"> 8,710</td>
Processing value('Bachelor's degree or higher): 8,710
Number of tables found: 1

<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M6G
 geo2021A0011M6Gstat1 geo2021A0011M6Gstat1gen1" title="2021A0011M6G - Bachelor's
 degree or higher - Counts - Total"> 13,140</td>
 Processing value('Bachelor's degree or higher): 13,140
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M6H
 geo2021A0011M6Hstat1 geo2021A0011M6Hstat1gen1" title="2021A0011M6H - Bachelor's
 degree or higher - Counts - Total"> 15,515</td>
 Processing value('Bachelor's degree or higher): 15,515
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M6J
 geo2021A0011M6Jstat1 geo2021A0011M6Jstat1gen1" title="2021A0011M6J - Bachelor's
 degree or higher - Counts - Total"> 14,095</td>
 Processing value('Bachelor's degree or higher): 14,095
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M6K
 geo2021A0011M6Kstat1 geo2021A0011M6Kstat1gen1" title="2021A0011M6K - Bachelor's
 degree or higher - Counts - Total"> 17,215</td>
 Processing value('Bachelor's degree or higher): 17,215
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M6L
 geo2021A0011M6Lstat1 geo2021A0011M6Lstat1gen1" title="2021A0011M6L - Bachelor's
 degree or higher - Counts - Total"> 3,120</td>
 Processing value('Bachelor's degree or higher): 3,120
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M6M
 geo2021A0011M6Mstat1 geo2021A0011M6Mstat1gen1" title="2021A0011M6M - Bachelor's
 degree or higher - Counts - Total"> 5,825</td>
 Processing value('Bachelor's degree or higher): 5,825
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M6N
 geo2021A0011M6Nstat1 geo2021A0011M6Nstat1gen1" title="2021A0011M6N - Bachelor's
 degree or higher - Counts - Total"> 7,190</td>
 Processing value('Bachelor's degree or higher): 7,190
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M6P
 geo2021A0011M6Pstat1 geo2021A0011M6Pstat1gen1" title="2021A0011M6P - Bachelor's
 degree or higher - Counts - Total"> 18,145</td>
 Processing value('Bachelor's degree or higher): 18,145
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M6R
 geo2021A0011M6Rstat1 geo2021A0011M6Rstat1gen1" title="2021A0011M6R - Bachelor's
 degree or higher - Counts - Total"> 9,135</td>
 Processing value('Bachelor's degree or higher): 9,135
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M6S
 geo2021A0011M6Sstat1 geo2021A0011M6Sstat1gen1" title="2021A0011M6S - Bachelor's
 degree or higher - Counts - Total"> 15,230</td>

Processing value('Bachelor's degree or higher): 15,230
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M7A
geo2021A0011M7Astat1 geo2021A0011M7Astat1gen1" title="2021A0011M7A - Bachelor's
degree or higher - Counts - Total"><abbr title="suppressed to meet the
confidentiality requirements of the Statistics Act">x</abbr></td>
Processing value('Bachelor's degree or higher): x
Non-numeric value encountered: x. Assigning default value 0.
Number of tables found: 0
No tables starts with this postal code: [https://www12.statcan.gc.ca/census-
recensement/2021/dp-
pd/prof/details/page.cfm?Lang=E&SearchText=M7R&DGUIDlist=2021A0011M7R](https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=M7R&DGUIDlist=2021A0011M7R).
Skipping...
Processing value('Bachelor's degree or higher): x
Non-numeric value encountered: x. Assigning default value 0.
Number of tables found: 0
No tables starts with this postal code: [https://www12.statcan.gc.ca/census-
recensement/2021/dp-
pd/prof/details/page.cfm?Lang=E&SearchText=M7Y&DGUIDlist=2021A0011M7Y](https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=M7Y&DGUIDlist=2021A0011M7Y).
Skipping...
Processing value('Bachelor's degree or higher): x
Non-numeric value encountered: x. Assigning default value 0.
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M8V
geo2021A0011M8Vstat1 geo2021A0011M8Vstat1gen1" title="2021A0011M8V - Bachelor's
degree or higher - Counts - Total"> 17,070</td>
Processing value('Bachelor's degree or higher): 17,070
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M8W
geo2021A0011M8Wstat1 geo2021A0011M8Wstat1gen1" title="2021A0011M8W - Bachelor's
degree or higher - Counts - Total"> 6,660</td>
Processing value('Bachelor's degree or higher): 6,660
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M8X
geo2021A0011M8Xstat1 geo2021A0011M8Xstat1gen1" title="2021A0011M8X - Bachelor's
degree or higher - Counts - Total"> 5,475</td>
Processing value('Bachelor's degree or higher): 5,475
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M8Y
geo2021A0011M8Ystat1 geo2021A0011M8Ystat1gen1" title="2021A0011M8Y - Bachelor's
degree or higher - Counts - Total"> 8,435</td>
Processing value('Bachelor's degree or higher): 8,435
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M8Z
geo2021A0011M8Zstat1 geo2021A0011M8Zstat1gen1" title="2021A0011M8Z - Bachelor's
degree or higher - Counts - Total"> 6,870</td>
Processing value('Bachelor's degree or higher): 6,870
Number of tables found: 1

<td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M9A
 geo2021A0011M9Astat1 geo2021A0011M9Astat1gen1" title="2021A0011M9A - Bachelor's
 degree or higher - Counts - Total"> 14,425</td>
 Processing value('Bachelor's degree or higher): 14,425
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M9B
 geo2021A0011M9Bstat1 geo2021A0011M9Bstat1gen1" title="2021A0011M9B - Bachelor's
 degree or higher - Counts - Total"> 12,120</td>
 Processing value('Bachelor's degree or higher): 12,120
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M9C
 geo2021A0011M9Cstat1 geo2021A0011M9Cstat1gen1" title="2021A0011M9C - Bachelor's
 degree or higher - Counts - Total"> 11,905</td>
 Processing value('Bachelor's degree or higher): 11,905
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M9L
 geo2021A0011M9Lstat1 geo2021A0011M9Lstat1gen1" title="2021A0011M9L - Bachelor's
 degree or higher - Counts - Total"> 1,960</td>
 Processing value('Bachelor's degree or higher): 1,960
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M9M
 geo2021A0011M9Mstat1 geo2021A0011M9Mstat1gen1" title="2021A0011M9M - Bachelor's
 degree or higher - Counts - Total"> 4,210</td>
 Processing value('Bachelor's degree or higher): 4,210
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M9N
 geo2021A0011M9Nstat1 geo2021A0011M9Nstat1gen1" title="2021A0011M9N - Bachelor's
 degree or higher - Counts - Total"> 4,015</td>
 Processing value('Bachelor's degree or higher): 4,015
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M9P
 geo2021A0011M9Pstat1 geo2021A0011M9Pstat1gen1" title="2021A0011M9P - Bachelor's
 degree or higher - Counts - Total"> 5,210</td>
 Processing value('Bachelor's degree or higher): 5,210
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M9R
 geo2021A0011M9Rstat1 geo2021A0011M9Rstat1gen1" title="2021A0011M9R - Bachelor's
 degree or higher - Counts - Total"> 7,610</td>
 Processing value('Bachelor's degree or higher): 7,610
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M9V
 geo2021A0011M9Vstat1 geo2021A0011M9Vstat1gen1" title="2021A0011M9V - Bachelor's
 degree or higher - Counts - Total"> 9,715</td>
 Processing value('Bachelor's degree or higher): 9,715
 Number of tables found: 1
 <td class="text-right text-nowrap" headers="rh37 r2008 geo2021A0011M9W
 geo2021A0011M9Wstat1 geo2021A0011M9Wstat1gen1" title="2021A0011M9W - Bachelor's
 degree or higher - Counts - Total"> 8,315</td>

Processing value('Bachelor's degree or higher): 8,315

```
[20]: # for non-mover, we want to find the neighbourhood with the stable vibe
for i in postal:
    url = "https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/
    ↪details/page.cfm?Lang=E"
    params = {
        'SearchText': i,
        'DGUIDlist': '2021A0011'+i
    }

    # this part switches up the postal code parameter in the url
    url_parts = list(urlparse.urlparse(url))
    query = dict(urlparse.parse_qs(url_parts[4]))
    query.update(params)

    url_parts[4] = urlencode(query)
    query = urlparse.urlunparse(url_parts)

    # the following code is similar to the above
    html = urllib.request.urlopen(query)
    html_to_parse = BeautifulSoup(html, "html.parser")
    tables = html_to_parse.find_all("table")
    print(f"Number of tables found: {len(tables)}")
    if len(tables) == 0:
        print(f"No tables starts with this postal code: {query}. Skipping...")#
    ↪no table under this postal code
    else:
        title = (f"2021A0011{i} - Non-movers - Counts - Total")
        td = tables[0].find(attrs={"title": title})
        print(td)
        if td and td.text.strip():
            print(f"Processing value('Non-Mover'): {td.text}")
            try:
                value = float(td.text.replace(",", "").strip()) #convert string to
    ↪the float
            except ValueError:
                # cannot convert, assign it to zero
                print(f"Non-numeric value encountered: {td.text}. Assigning default
    ↪value 0.")
                value = 0.0
            else:
                # cannot find, assign it to zero
                print(f"Skipping: No valid data found for title '{title}'. Assigning
    ↪default value 0.")
                value = 0.0
            df2.loc[len(df2.index)] = [i, title, value]
```

Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1B
geo2021A0011M1Bstat1 geo2021A0011M1Bstat1gen1" title="2021A0011M1B - Non-movers
- Counts - Total"> 59,145</td>
Processing value('Non-Mover'): 59,145
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1C
geo2021A0011M1Cstat1 geo2021A0011M1Cstat1gen1" title="2021A0011M1C - Non-movers
- Counts - Total"> 32,690</td>
Processing value('Non-Mover'): 32,690
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1E
geo2021A0011M1Estat1 geo2021A0011M1Estat1gen1" title="2021A0011M1E - Non-movers
- Counts - Total"> 42,740</td>
Processing value('Non-Mover'): 42,740
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1G
geo2021A0011M1Gstat1 geo2021A0011M1Gstat1gen1" title="2021A0011M1G - Non-movers
- Counts - Total"> 27,215</td>
Processing value('Non-Mover'): 27,215
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1H
geo2021A0011M1Hstat1 geo2021A0011M1Hstat1gen1" title="2021A0011M1H - Non-movers
- Counts - Total"> 20,625</td>
Processing value('Non-Mover'): 20,625
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1J
geo2021A0011M1Jstat1 geo2021A0011M1Jstat1gen1" title="2021A0011M1J - Non-movers
- Counts - Total"> 33,880</td>
Processing value('Non-Mover'): 33,880
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1K
geo2021A0011M1Kstat1 geo2021A0011M1Kstat1gen1" title="2021A0011M1K - Non-movers
- Counts - Total"> 43,200</td>
Processing value('Non-Mover'): 43,200
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1L
geo2021A0011M1Lstat1 geo2021A0011M1Lstat1gen1" title="2021A0011M1L - Non-movers
- Counts - Total"> 31,350</td>
Processing value('Non-Mover'): 31,350
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1M
geo2021A0011M1Mstat1 geo2021A0011M1Mstat1gen1" title="2021A0011M1M - Non-movers
- Counts - Total"> 20,765</td>
Processing value('Non-Mover'): 20,765
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1N
geo2021A0011M1Nstat1 geo2021A0011M1Nstat1gen1" title="2021A0011M1N - Non-movers

- Counts - Total"> 20,090</td>
Processing value('Non-Mover'): 20,090
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1P
geo2021A0011M1Pstat1 geo2021A0011M1Pstat1gen1" title="2021A0011M1P - Non-movers
- Counts - Total"> 39,075</td>
Processing value('Non-Mover'): 39,075
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1R
geo2021A0011M1Rstat1 geo2021A0011M1Rstat1gen1" title="2021A0011M1R - Non-movers
- Counts - Total"> 27,500</td>
Processing value('Non-Mover'): 27,500
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1S
geo2021A0011M1Sstat1 geo2021A0011M1Sstat1gen1" title="2021A0011M1S - Non-movers
- Counts - Total"> 33,030</td>
Processing value('Non-Mover'): 33,030
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1T
geo2021A0011M1Tstat1 geo2021A0011M1Tstat1gen1" title="2021A0011M1T - Non-movers
- Counts - Total"> 30,605</td>
Processing value('Non-Mover'): 30,605
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1V
geo2021A0011M1Vstat1 geo2021A0011M1Vstat1gen1" title="2021A0011M1V - Non-movers
- Counts - Total"> 45,655</td>
Processing value('Non-Mover'): 45,655
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1W
geo2021A0011M1Wstat1 geo2021A0011M1Wstat1gen1" title="2021A0011M1W - Non-movers
- Counts - Total"> 42,150</td>
Processing value('Non-Mover'): 42,150
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M1X
geo2021A0011M1Xstat1 geo2021A0011M1Xstat1gen1" title="2021A0011M1X - Non-movers
- Counts - Total"> 13,930</td>
Processing value('Non-Mover'): 13,930
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M2H
geo2021A0011M2Hstat1 geo2021A0011M2Hstat1gen1" title="2021A0011M2H - Non-movers
- Counts - Total"> 20,890</td>
Processing value('Non-Mover'): 20,890
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M2J
geo2021A0011M2Jstat1 geo2021A0011M2Jstat1gen1" title="2021A0011M2J - Non-movers
- Counts - Total"> 51,585</td>
Processing value('Non-Mover'): 51,585
Number of tables found: 1

```

<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M2K
geo2021A0011M2Kstat1 geo2021A0011M2Kstat1gen1" title="2021A0011M2K - Non-movers
- Counts - Total"> 19,930</td>
Processing value('Non-Mover'): 19,930
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M2L
geo2021A0011M2Lstat1 geo2021A0011M2Lstat1gen1" title="2021A0011M2L - Non-movers
- Counts - Total"> 10,050</td>
Processing value('Non-Mover'): 10,050
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M2M
geo2021A0011M2Mstat1 geo2021A0011M2Mstat1gen1" title="2021A0011M2M - Non-movers
- Counts - Total"> 26,690</td>
Processing value('Non-Mover'): 26,690
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M2N
geo2021A0011M2Nstat1 geo2021A0011M2Nstat1gen1" title="2021A0011M2N - Non-movers
- Counts - Total"> 59,225</td>
Processing value('Non-Mover'): 59,225
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M2P
geo2021A0011M2Pstat1 geo2021A0011M2Pstat1gen1" title="2021A0011M2P - Non-movers
- Counts - Total"> 6,670</td>
Processing value('Non-Mover'): 6,670
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M2R
geo2021A0011M2Rstat1 geo2021A0011M2Rstat1gen1" title="2021A0011M2R - Non-movers
- Counts - Total"> 35,515</td>
Processing value('Non-Mover'): 35,515
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M3A
geo2021A0011M3Astat1 geo2021A0011M3Astat1gen1" title="2021A0011M3A - Non-movers
- Counts - Total"> 30,820</td>
Processing value('Non-Mover'): 30,820
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M3B
geo2021A0011M3Bstat1 geo2021A0011M3Bstat1gen1" title="2021A0011M3B - Non-movers
- Counts - Total"> 11,485</td>
Processing value('Non-Mover'): 11,485
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M3C
geo2021A0011M3Cstat1 geo2021A0011M3Cstat1gen1" title="2021A0011M3C - Non-movers
- Counts - Total"> 34,455</td>
Processing value('Non-Mover'): 34,455
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M3H
geo2021A0011M3Hstat1 geo2021A0011M3Hstat1gen1" title="2021A0011M3H - Non-movers
- Counts - Total"> 32,995</td>

```

Processing value('Non-Mover'): 32,995
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M3J
geo2021A0011M3Jstat1 geo2021A0011M3Jstat1gen1" title="2021A0011M3J - Non-movers
- Counts - Total"> 22,935</td>
Processing value('Non-Mover'): 22,935
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M3K
geo2021A0011M3Kstat1 geo2021A0011M3Kstat1gen1" title="2021A0011M3K - Non-movers
- Counts - Total"> 6,595</td>
Processing value('Non-Mover'): 6,595
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M3L
geo2021A0011M3Lstat1 geo2021A0011M3Lstat1gen1" title="2021A0011M3L - Non-movers
- Counts - Total"> 17,730</td>
Processing value('Non-Mover'): 17,730
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M3M
geo2021A0011M3Mstat1 geo2021A0011M3Mstat1gen1" title="2021A0011M3M - Non-movers
- Counts - Total"> 22,865</td>
Processing value('Non-Mover'): 22,865
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M3N
geo2021A0011M3Nstat1 geo2021A0011M3Nstat1gen1" title="2021A0011M3N - Non-movers
- Counts - Total"> 37,410</td>
Processing value('Non-Mover'): 37,410
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4A
geo2021A0011M4Astat1 geo2021A0011M4Astat1gen1" title="2021A0011M4A - Non-movers
- Counts - Total"> 12,875</td>
Processing value('Non-Mover'): 12,875
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4B
geo2021A0011M4Bstat1 geo2021A0011M4Bstat1gen1" title="2021A0011M4B - Non-movers
- Counts - Total"> 16,455</td>
Processing value('Non-Mover'): 16,455
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4C
geo2021A0011M4Cstat1 geo2021A0011M4Cstat1gen1" title="2021A0011M4C - Non-movers
- Counts - Total"> 40,330</td>
Processing value('Non-Mover'): 40,330
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4E
geo2021A0011M4Estat1 geo2021A0011M4Estat1gen1" title="2021A0011M4E - Non-movers
- Counts - Total"> 22,775</td>
Processing value('Non-Mover'): 22,775
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4G

geo2021A0011M4Gstat1 geo2021A0011M4Gstat1gen1" title="2021A0011M4G - Non-movers
- Counts - Total"> 17,440</td>
Processing value('Non-Mover'): 17,440
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4H
geo2021A0011M4Hstat1 geo2021A0011M4Hstat1gen1" title="2021A0011M4H - Non-movers
- Counts - Total"> 16,785</td>
Processing value('Non-Mover'): 16,785
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4J
geo2021A0011M4Jstat1 geo2021A0011M4Jstat1gen1" title="2021A0011M4J - Non-movers
- Counts - Total"> 31,695</td>
Processing value('Non-Mover'): 31,695
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4K
geo2021A0011M4Kstat1 geo2021A0011M4Kstat1gen1" title="2021A0011M4K - Non-movers
- Counts - Total"> 27,360</td>
Processing value('Non-Mover'): 27,360
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4L
geo2021A0011M4Lstat1 geo2021A0011M4Lstat1gen1" title="2021A0011M4L - Non-movers
- Counts - Total"> 27,945</td>
Processing value('Non-Mover'): 27,945
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4M
geo2021A0011M4Mstat1 geo2021A0011M4Mstat1gen1" title="2021A0011M4M - Non-movers
- Counts - Total"> 20,615</td>
Processing value('Non-Mover'): 20,615
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4N
geo2021A0011M4Nstat1 geo2021A0011M4Nstat1gen1" title="2021A0011M4N - Non-movers
- Counts - Total"> 13,200</td>
Processing value('Non-Mover'): 13,200
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4P
geo2021A0011M4Pstat1 geo2021A0011M4Pstat1gen1" title="2021A0011M4P - Non-movers
- Counts - Total"> 18,420</td>
Processing value('Non-Mover'): 18,420
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4R
geo2021A0011M4Rstat1 geo2021A0011M4Rstat1gen1" title="2021A0011M4R - Non-movers
- Counts - Total"> 10,215</td>
Processing value('Non-Mover'): 10,215
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4S
geo2021A0011M4Sstat1 geo2021A0011M4Sstat1gen1" title="2021A0011M4S - Non-movers
- Counts - Total"> 23,100</td>
Processing value('Non-Mover'): 23,100

Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4T
geo2021A0011M4Tstat1 geo2021A0011M4Tstat1gen1" title="2021A0011M4T - Non-movers
- Counts - Total"> 8,905</td>
Processing value('Non-Mover'): 8,905
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4V
geo2021A0011M4Vstat1 geo2021A0011M4Vstat1gen1" title="2021A0011M4V - Non-movers
- Counts - Total"> 15,910</td>
Processing value('Non-Mover'): 15,910
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4W
geo2021A0011M4Wstat1 geo2021A0011M4Wstat1gen1" title="2021A0011M4W - Non-movers
- Counts - Total"> 12,025</td>
Processing value('Non-Mover'): 12,025
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4X
geo2021A0011M4Xstat1 geo2021A0011M4Xstat1gen1" title="2021A0011M4X - Non-movers
- Counts - Total"> 16,960</td>
Processing value('Non-Mover'): 16,960
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M4Y
geo2021A0011M4Ystat1 geo2021A0011M4Ystat1gen1" title="2021A0011M4Y - Non-movers
- Counts - Total"> 24,135</td>
Processing value('Non-Mover'): 24,135
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M5A
geo2021A0011M5Astat1 geo2021A0011M5Astat1gen1" title="2021A0011M5A - Non-movers
- Counts - Total"> 36,815</td>
Processing value('Non-Mover'): 36,815
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M5B
geo2021A0011M5Bstat1 geo2021A0011M5Bstat1gen1" title="2021A0011M5B - Non-movers
- Counts - Total"> 11,185</td>
Processing value('Non-Mover'): 11,185
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M5C
geo2021A0011M5Cstat1 geo2021A0011M5Cstat1gen1" title="2021A0011M5C - Non-movers
- Counts - Total"> 2,310</td>
Processing value('Non-Mover'): 2,310
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M5E
geo2021A0011M5Estat1 geo2021A0011M5Estat1gen1" title="2021A0011M5E - Non-movers
- Counts - Total"> 7,975</td>
Processing value('Non-Mover'): 7,975
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M5G
geo2021A0011M5Gstat1 geo2021A0011M5Gstat1gen1" title="2021A0011M5G - Non-movers

- Counts - Total"> 5,950</td>
Processing value('Non-Mover'): 5,950
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M5H
geo2021A0011M5Hstat1 geo2021A0011M5Hstat1gen1" title="2021A0011M5H - Non-movers
- Counts - Total"> 1,775</td>
Processing value('Non-Mover'): 1,775
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M5J
geo2021A0011M5Jstat1 geo2021A0011M5Jstat1gen1" title="2021A0011M5J - Non-movers
- Counts - Total"> 11,065</td>
Processing value('Non-Mover'): 11,065
Number of tables found: 0
No tables starts with this postal code: <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=M5K&DGUIDlist=2021A0011M5K>.
Skipping...
Processing value('Non-Mover'): 11,065
Number of tables found: 0
No tables starts with this postal code: <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=M5L&DGUIDlist=2021A0011M5L>.
Skipping...
Processing value('Non-Mover'): 11,065
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M5M
geo2021A0011M5Mstat1 geo2021A0011M5Mstat1gen1" title="2021A0011M5M - Non-movers
- Counts - Total"> 23,500</td>
Processing value('Non-Mover'): 23,500
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M5N
geo2021A0011M5Nstat1 geo2021A0011M5Nstat1gen1" title="2021A0011M5N - Non-movers
- Counts - Total"> 14,285</td>
Processing value('Non-Mover'): 14,285
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M5P
geo2021A0011M5Pstat1 geo2021A0011M5Pstat1gen1" title="2021A0011M5P - Non-movers
- Counts - Total"> 17,140</td>
Processing value('Non-Mover'): 17,140
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M5R
geo2021A0011M5Rstat1 geo2021A0011M5Rstat1gen1" title="2021A0011M5R - Non-movers
- Counts - Total"> 20,080</td>
Processing value('Non-Mover'): 20,080
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M5S
geo2021A0011M5Sstat1 geo2021A0011M5Sstat1gen1" title="2021A0011M5S - Non-movers
- Counts - Total"> 10,640</td>

Processing value('Non-Mover'): 10,640
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M5T
geo2021A0011M5Tstat1 geo2021A0011M5Tstat1gen1" title="2021A0011M5T - Non-movers
- Counts - Total"> 13,730</td>
Processing value('Non-Mover'): 13,730
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M5V
geo2021A0011M5Vstat1 geo2021A0011M5Vstat1gen1" title="2021A0011M5V - Non-movers
- Counts - Total"> 37,820</td>
Processing value('Non-Mover'): 37,820
Number of tables found: 0
No tables starts with this postal code: [https://www12.statcan.gc.ca/census-
recensement/2021/dp-
pd/prof/details/page.cfm?Lang=E&SearchText=M5W&DGUIDlist=2021A0011M5W](https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=M5W&DGUIDlist=2021A0011M5W).
Skipping...
Processing value('Non-Mover'): 37,820
Number of tables found: 0
No tables starts with this postal code: [https://www12.statcan.gc.ca/census-
recensement/2021/dp-
pd/prof/details/page.cfm?Lang=E&SearchText=M5X&DGUIDlist=2021A0011M5X](https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=M5X&DGUIDlist=2021A0011M5X).
Skipping...
Processing value('Non-Mover'): 37,820
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M6A
geo2021A0011M6Astat1 geo2021A0011M6Astat1gen1" title="2021A0011M6A - Non-movers
- Counts - Total"> 19,415</td>
Processing value('Non-Mover'): 19,415
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M6B
geo2021A0011M6Bstat1 geo2021A0011M6Bstat1gen1" title="2021A0011M6B - Non-movers
- Counts - Total"> 25,280</td>
Processing value('Non-Mover'): 25,280
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M6C
geo2021A0011M6Cstat1 geo2021A0011M6Cstat1gen1" title="2021A0011M6C - Non-movers
- Counts - Total"> 21,450</td>
Processing value('Non-Mover'): 21,450
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M6E
geo2021A0011M6Estat1 geo2021A0011M6Estat1gen1" title="2021A0011M6E - Non-movers
- Counts - Total"> 32,910</td>
Processing value('Non-Mover'): 32,910
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M6G
geo2021A0011M6Gstat1 geo2021A0011M6Gstat1gen1" title="2021A0011M6G - Non-movers
- Counts - Total"> 25,170</td>
Processing value('Non-Mover'): 25,170

Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M6H
geo2021A0011M6Hstat1 geo2021A0011M6Hstat1gen1" title="2021A0011M6H - Non-movers
- Counts - Total"> 36,890</td>
Processing value('Non-Mover'): 36,890
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M6J
geo2021A0011M6Jstat1 geo2021A0011M6Jstat1gen1" title="2021A0011M6J - Non-movers
- Counts - Total"> 25,350</td>
Processing value('Non-Mover'): 25,350
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M6K
geo2021A0011M6Kstat1 geo2021A0011M6Kstat1gen1" title="2021A0011M6K - Non-movers
- Counts - Total"> 31,465</td>
Processing value('Non-Mover'): 31,465
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M6L
geo2021A0011M6Lstat1 geo2021A0011M6Lstat1gen1" title="2021A0011M6L - Non-movers
- Counts - Total"> 18,400</td>
Processing value('Non-Mover'): 18,400
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M6M
geo2021A0011M6Mstat1 geo2021A0011M6Mstat1gen1" title="2021A0011M6M - Non-movers
- Counts - Total"> 38,100</td>
Processing value('Non-Mover'): 38,100
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M6N
geo2021A0011M6Nstat1 geo2021A0011M6Nstat1gen1" title="2021A0011M6N - Non-movers
- Counts - Total"> 36,510</td>
Processing value('Non-Mover'): 36,510
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M6P
geo2021A0011M6Pstat1 geo2021A0011M6Pstat1gen1" title="2021A0011M6P - Non-movers
- Counts - Total"> 33,125</td>
Processing value('Non-Mover'): 33,125
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M6R
geo2021A0011M6Rstat1 geo2021A0011M6Rstat1gen1" title="2021A0011M6R - Non-movers
- Counts - Total"> 16,365</td>
Processing value('Non-Mover'): 16,365
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M6S
geo2021A0011M6Sstat1 geo2021A0011M6Sstat1gen1" title="2021A0011M6S - Non-movers
- Counts - Total"> 30,465</td>
Processing value('Non-Mover'): 30,465
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M7A
geo2021A0011M7Astat1 geo2021A0011M7Astat1gen1" title="2021A0011M7A - Non-movers

- Counts - Total"><abbr title="suppressed to meet the confidentiality requirements of the Statistics Act">x</abbr></td>

Processing value('Non-Mover'): x

Non-numeric value encountered: x. Assigning default value 0.

Number of tables found: 0

No tables starts with this postal code: <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=M7R&DGUIDlist=2021A0011M7R>.

Skipping...

Processing value('Non-Mover'): x

Non-numeric value encountered: x. Assigning default value 0.

Number of tables found: 0

No tables starts with this postal code: <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&SearchText=M7Y&DGUIDlist=2021A0011M7Y>.

Skipping...

Processing value('Non-Mover'): x

Non-numeric value encountered: x. Assigning default value 0.

Number of tables found: 1

<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M8V geo2021A0011M8Vstat1 geo2021A0011M8Vstat1gen1" title="2021A0011M8V - Non-movers - Counts - Total"> 36,260</td>

Processing value('Non-Mover'): 36,260

Number of tables found: 1

<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M8W geo2021A0011M8Wstat1 geo2021A0011M8Wstat1gen1" title="2021A0011M8W - Non-movers - Counts - Total"> 19,805</td>

Processing value('Non-Mover'): 19,805

Number of tables found: 1

<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M8X geo2021A0011M8Xstat1 geo2021A0011M8Xstat1gen1" title="2021A0011M8X - Non-movers - Counts - Total"> 9,360</td>

Processing value('Non-Mover'): 9,360

Number of tables found: 1

<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M8Y geo2021A0011M8Ystat1 geo2021A0011M8Ystat1gen1" title="2021A0011M8Y - Non-movers - Counts - Total"> 19,250</td>

Processing value('Non-Mover'): 19,250

Number of tables found: 1

<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M8Z geo2021A0011M8Zstat1 geo2021A0011M8Zstat1gen1" title="2021A0011M8Z - Non-movers - Counts - Total"> 16,305</td>

Processing value('Non-Mover'): 16,305

Number of tables found: 1

<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M9A geo2021A0011M9Astat1 geo2021A0011M9Astat1gen1" title="2021A0011M9A - Non-movers - Counts - Total"> 31,220</td>

Processing value('Non-Mover'): 31,220

Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M9B
geo2021A0011M9Bstat1 geo2021A0011M9Bstat1gen1" title="2021A0011M9B - Non-movers
- Counts - Total"> 30,040</td>
Processing value('Non-Mover'): 30,040
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M9C
geo2021A0011M9Cstat1 geo2021A0011M9Cstat1gen1" title="2021A0011M9C - Non-movers
- Counts - Total"> 34,455</td>
Processing value('Non-Mover'): 34,455
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M9L
geo2021A0011M9Lstat1 geo2021A0011M9Lstat1gen1" title="2021A0011M9L - Non-movers
- Counts - Total"> 10,520</td>
Processing value('Non-Mover'): 10,520
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M9M
geo2021A0011M9Mstat1 geo2021A0011M9Mstat1gen1" title="2021A0011M9M - Non-movers
- Counts - Total"> 22,125</td>
Processing value('Non-Mover'): 22,125
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M9N
geo2021A0011M9Nstat1 geo2021A0011M9Nstat1gen1" title="2021A0011M9N - Non-movers
- Counts - Total"> 23,870</td>
Processing value('Non-Mover'): 23,870
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M9P
geo2021A0011M9Pstat1 geo2021A0011M9Pstat1gen1" title="2021A0011M9P - Non-movers
- Counts - Total"> 18,400</td>
Processing value('Non-Mover'): 18,400
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M9R
geo2021A0011M9Rstat1 geo2021A0011M9Rstat1gen1" title="2021A0011M9R - Non-movers
- Counts - Total"> 30,900</td>
Processing value('Non-Mover'): 30,900
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M9V
geo2021A0011M9Vstat1 geo2021A0011M9Vstat1gen1" title="2021A0011M9V - Non-movers
- Counts - Total"> 48,560</td>
Processing value('Non-Mover'): 48,560
Number of tables found: 1
<td class="text-right text-nowrap" headers="rh33 r1961 geo2021A0011M9W
geo2021A0011M9Wstat1 geo2021A0011M9Wstat1gen1" title="2021A0011M9W - Non-movers
- Counts - Total"> 37,165</td>
Processing value('Non-Mover'): 37,165

```
[ ]: df.head()
dfSort = df.sort_values(by = 'value', ascending = False)
dfSort
unique_df = dfSort.drop_duplicates(subset=["postal_code"], keep="first")# drop
↳the duplicate postal code
unique_df
unique_df['Score'] = unique_df['value'].rank(ascending=True, method='dense').
↳astype(int)
unique_df
```

```
[17]: df1.head()
dfSort1 = df1.sort_values(by = 'value', ascending = False)
dfSort1
unique_df1 = dfSort1.drop_duplicates(subset=["postal_code"], keep="first")#
↳drop the duplicate postal code
unique_df1
unique_df1['Score'] = unique_df1['value'].rank(ascending=True, method='dense').
↳astype(int)
unique_df1
```

```
[17]:
```

	postal_code		data	value \
22	M2N	2021A0011M2N - Bachelor's degree or higher - C...		39350.0
68	M5V	2021A0011M5V - Bachelor's degree or higher - C...		39245.0
69	M5W	2021A0011M5V - Bachelor's degree or higher - C...		39245.0
70	M5X	2021A0011M5V - Bachelor's degree or higher - C...		39245.0
18	M2J	2021A0011M2J - Bachelor's degree or higher - C...		24985.0
..
96	M9L	2021A0011M9L - Bachelor's degree or higher - C...		1960.0
55	M5C	2021A0011M5C - Bachelor's degree or higher - C...		1770.0
87	M7Y	2021A0011M7A - Bachelor's degree or higher - C...		0.0
86	M7R	2021A0011M7A - Bachelor's degree or higher - C...		0.0
85	M7A	2021A0011M7A - Bachelor's degree or higher - C...		0.0

```
Score
22    94
68    93
69    93
70    93
18    92
..    ...
96     3
55     2
87     1
86     1
85     1
```

```
[103 rows x 4 columns]
```

```
[26]: df2.head()
dfSort2 = df2.sort_values(by = 'value', ascending = False)
dfSort2
unique_df2 = dfSort2.drop_duplicates(subset=["postal_code"], keep="first")#
↳drop the duplicate postal code
unique_df2
unique_df2['Score'] = unique_df2['value'].rank(ascending=True, method='dense').
↳astype(int)
unique_df2
```

```
[26]:
```

	postal_code	data	value	Score
22	M2N	2021A0011M2N - Non-movers - Counts - Total	59225.0	95
0	M1B	2021A0011M1B - Non-movers - Counts - Total	59145.0	94
18	M2J	2021A0011M2J - Non-movers - Counts - Total	51585.0	93
101	M9V	2021A0011M9V - Non-movers - Counts - Total	48560.0	92
14	M1V	2021A0011M1V - Non-movers - Counts - Total	45655.0	91
..
55	M5C	2021A0011M5C - Non-movers - Counts - Total	2310.0	3
58	M5H	2021A0011M5H - Non-movers - Counts - Total	1775.0	2
86	M7R	2021A0011M7A - Non-movers - Counts - Total	0.0	1
87	M7Y	2021A0011M7A - Non-movers - Counts - Total	0.0	1
85	M7A	2021A0011M7A - Non-movers - Counts - Total	0.0	1

[103 rows x 4 columns]

```
[28]: # Now you can export this to a CSV file for further analysis or visulization
unique_df.to_csv('after tax income sorted value.csv')
#unique_df1.to_csv('bachelors degress.csv')
unique_df2.to_csv('non_movers.csv')
```

```
[ ]:
```

```
[ ]:
```