

```
In [1]: import numpy as np
import pandas as pd
```

```
In [4]: df = pd.read_csv('artwork_data (1).csv')
df
```

```
-----
----
FileNotFoundError                                Traceback (most recent call l
ast)
<ipython-input-4-5d58eccf8f1d> in <module>
----> 1 df = pd.read_csv('artwork_data (1).csv')
      2 df

~\anaconda3\lib\site-packages\pandas\io\parsers.py in read_csv(filepath
_or_buffer, sep, delimiter, header, names, index_col, usecols, squeeze,
prefix, mangle_dupe_cols, dtype, engine, converters, true_values, fals
e_values, skipinitialspace, skiprows, skipfooter, nrows, na_values, kee
p_default_na, na_filter, verbose, skip_blank_lines, parse_dates, infer_
datetime_format, keep_date_col, date_parser, dayfirst, cache_dates, ite
rator, chunksize, compression, thousands, decimal, lineterminator, quot
echar, quoting, doublequote, escapechar, comment, encoding, dialect, er
ror_bad_lines, warn_bad_lines, delim_whitespace, low_memory, memory_ma
p, float_precision)
    684     )
    685
--> 686     return _read(filepath_or_buffer, kwds)
    687
    688

~\anaconda3\lib\site-packages\pandas\io\parsers.py in _read(filepath_or
_buffer, kwds)
    450
    451     # Create the parser.
--> 452     parser = TextFileReader(fp_or_buf, **kwds)
    453
```

```

454     if chunksize or iterator:

~\anaconda3\lib\site-packages\pandas\io\parsers.py in __init__(self, f,
engine, **kwargs)
    934         self.options["has_index_names"] = kwargs["has_index_n
ames"]
    935
--> 936         self._make_engine(self.engine)
    937
    938     def close(self):

~\anaconda3\lib\site-packages\pandas\io\parsers.py in _make_engine(sel
f, engine)
    1166     def _make_engine(self, engine="c"):
    1167         if engine == "c":
-> 1168             self._engine = CParserWrapper(self.f, **self.option
s)
    1169         else:
    1170             if engine == "python":

~\anaconda3\lib\site-packages\pandas\io\parsers.py in __init__(self, sr
c, **kwargs)
    1996         kwargs["usecols"] = self.usecols
    1997
-> 1998         self._reader = parsers.TextReader(src, **kwargs)
    1999         self.unnamed_cols = self._reader.unnamed_cols
    2000

pandas\_libs\parsers.pyx in pandas._libs.parsers.TextReader._cinit__()

pandas\_libs\parsers.pyx in pandas._libs.parsers.TextReader._setup_pars
er_source()

FileNotFoundError: [Errno 2] No such file or directory: 'artwork_data
(1).csv'

```

In [5]: !pip install pandas --upgrade

Collecting pandas

```
Downloading pandas-1.1.2-cp37-cp37m-win_amd64.whl (9.4 MB)
Requirement already satisfied, skipping upgrade: numpy>=1.15.4 in c:\users\am\anaconda3\lib\site-packages (from pandas) (1.19.1)
Requirement already satisfied, skipping upgrade: python-dateutil>=2.7.3 in c:\users\am\anaconda3\lib\site-packages (from pandas) (2.8.1)
Requirement already satisfied, skipping upgrade: pytz>=2017.2 in c:\users\am\anaconda3\lib\site-packages (from pandas) (2019.3)
Requirement already satisfied, skipping upgrade: six>=1.5 in c:\users\am\anaconda3\lib\site-packages (from python-dateutil>=2.7.3->pandas) (1.14.0)
Installing collected packages: pandas
  Attempting uninstall: pandas
    Found existing installation: pandas 1.1.1
    Uninstalling pandas-1.1.1:
      Successfully uninstalled pandas-1.1.1
```

```
ERROR: Could not install packages due to an EnvironmentError: [WinError 5] Access is denied: 'c:\\users\\am\\anaconda3\\lib\\site-packages\\~andas\\_libs\\algos.cp37-win_amd64.pyd'
Consider using the '--user' option or check the permissions.
```

```
In [6]: !pip install pandas
```

```
Requirement already satisfied: pandas in c:\users\am\anaconda3\lib\site-packages (1.1.2)
Requirement already satisfied: numpy>=1.15.4 in c:\users\am\anaconda3\lib\site-packages (from pandas) (1.19.1)
Requirement already satisfied: python-dateutil>=2.7.3 in c:\users\am\anaconda3\lib\site-packages (from pandas) (2.8.1)
Requirement already satisfied: pytz>=2017.2 in c:\users\am\anaconda3\lib\site-packages (from pandas) (2019.3)
Requirement already satisfied: six>=1.5 in c:\users\am\anaconda3\lib\site-packages (from python-dateutil>=2.7.3->pandas) (1.14.0)
```

```
In [8]: import pandas as pd
```

```
In [11]: df = pd.read_csv('artwork_data (1).csv')
```

df

```
C:\Users\AM\anaconda3\lib\site-packages\IPython\core\interactiveshell.py:3063: DtypeWarning: Columns (9,13) have mixed types.Specify dtype option on import or set low_memory=False.  
interactivity=interactivity, compiler=compiler, result=result)
```

Out[11]:

	id	accession_number	artist	artistRole	artistId	title	dateText	med
0	1035	A00001	Blake, Robert	artist	38	A Figure Bowing before a Seated Old Man with h...	date not known	Watercol ink, cl and grap on paper
1	1036	A00002	Blake, Robert	artist	38	Two Drawings of Frightened Figures, Probably f...	date not known	Graphite pa
2	1037	A00003	Blake, Robert	artist	38	The Preaching of Warning. Verso: An Old Man En...	?c.1785	Graphite pa Ve graphite pa
3	1038	A00004	Blake, Robert	artist	38	Six Drawings of Figures with Outstretched Arms	date not known	Graphite pa
4	1039	A00005	Blake, William	artist	39	The Circle of the Lustful: Francesca da Rimini...	1826–7, reprinted 1892	I engrav on pa
...	...	...	...	...	...	...	...	...

	id	accession_number	artist	artistRole	artistId	title	dateText	med
<b>69196</b>	122960	T13865	P- Orridge, Genesis	artist	16646	Larvae (from Tampax Romana)	1975	Persj Wo hairpi tampon hur bl
<b>69197</b>	122961	T13866	P- Orridge, Genesis	artist	16646	Living Womb (from Tampax Romana)	1976	Wo Persj pla photogr on paper
<b>69198</b>	121181	T13867	Hatoum, Mona	artist	2365	Present Tense	1996	Soap glass be
<b>69199</b>	112306	T13868	Creed, Martin	artist	2760	Work No. 227: The lights going on and off	2000	Gal ligh
<b>69200</b>	127035	T13869	Brunias, Agostino	artist	3824	Dancing Scene in the West Indies	1764–96	Oil pain car

69201 rows × 20 columns

```
In [12]: df = pd.read_csv('artwork_data (1).csv', index_col = 0)
df
```

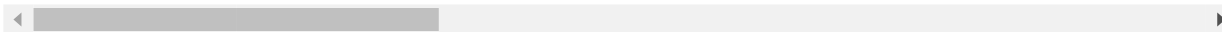
```
C:\Users\AM\anaconda3\lib\site-packages\IPython\core\interactiveshell.p
y:3063: DtypeWarning: Columns (9,13) have mixed types.Specify dtype opt
ion on import or set low_memory=False.
interactivity=interactivity, compiler=compiler, result=result)
```

Out[12]:

id	accession_number	artist	artistRole	artistId	title	dateText	medium	crec
1035	A00001	Blake, Robert	artist	38	A Figure Bowing before a Seated Old Man with h...	date not known	Watercolour, ink, chalk and graphite on paper....	Pre Ric
1036	A00002	Blake, Robert	artist	38	Two Drawings of Frightened Figures, Probably f...	date not known	Graphite on paper	Pre Ric
1037	A00003	Blake, Robert	artist	38	The Preaching of Warning. Verso: An Old Man En...	?c.1785	Graphite on paper. Verso: graphite on paper	Pre Ric
1038	A00004	Blake, Robert	artist	38	Six Drawings of Figures with Outstretched Arms	date not known	Graphite on paper	Pre Ric
1039	A00005	Blake, William	artist	39	The Circle of the Lustful: Francesca da Rimini...	1826–7, reprinted 1892	Line engraving on paper	Pur w assi of a
...	...	...	...	...	...	...	...	...
122960	T13865	P-Orridge, Genesis	artist	16646	Larvae (from Tampax Romana)	1975	Perspex, Wood, hairpiece, tampon and human blood	Trans fro A

	accession_number	artist	artistRole	artistId	title	dateText	medium	cred
id								
122961	T13866	P-Orridge, Genesis	artist	16646	Living Womb (from Tampax Romana)	1976	Wood, Perspex, plastic, photograph on paper, t...	Trans from A
121181	T13867	Hatoum, Mona	artist	2365	Present Tense	1996	Soap and glass beads	Pre t Me
112306	T13868	Creed, Martin	artist	2760	Work No. 227: The lights going on and off	2000	Gallery lighting	Purc with provi Mem
127035	T13869	Brunias, Agostino	artist	3824	Dancing Scene in the West Indies	1764–96	Oil paint on canvas	Purc assi from F

69201 rows × 19 columns



```
In [13]: df = pd.read_csv('artwork_data (1).csv', nrows = 5, index_col = 'id')
df
```

Out[13]:

	accession_number	artist	artistRole	artistId	title	dateText	medium	creditLin
id								
1035	A00001	Blake, Robert	artist	38	A Figure Bowing before a Seated Old Man with h...	date not known	Watercolour, ink, chalk and graphite on paper....	Presente by Mr Joh Richmon 192

	accession_number	artist	artistRole	artistId	title	dateText	medium	creditLin
id								
1036	A00002	Blake, Robert	artist	38	Two Drawings of Frightened Figures, Probably f...	date not known	Graphite on paper	Presente by Mr Joh Richmon 192
1037	A00003	Blake, Robert	artist	38	The Preaching of Warning. Verso: An Old Man En...	?c.1785	Graphite on paper. Verso: graphite on paper	Presente by Mr Joh Richmon 192
1038	A00004	Blake, Robert	artist	38	Six Drawings of Figures with Outstretched Arms	date not known	Graphite on paper	Presente by Mr Joh Richmon 192
1039	A00005	Blake, William	artist	39	The Circle of the Lustful: Francesca da Rimini...	1826–7, reprinted 1892	Line engraving on paper	Purchase with th assistanc of speci gra.

```
In [15]: df = pd.read_csv('artwork_data (1).csv', nrows = 5, index_col = 'id', u
secols = ['id', 'artistId', 'title', 'medium', 'acquisitionYear'])
df
```

Out[15]:

	artistId	title	medium	acquisitionYear
id				
1035	38	A Figure Bowing before a Seated Old Man with h...	Watercolour, ink, chalk and graphite on paper....	1922
1036	38	Two Drawings of Frightened Figures, Probably f...	Graphite on paper	1922



	artistId		title	medium	acquisitionYear
	id				
1037	38	The Preaching of Warning. Verso: An Old Man En...	Graphite on paper. Verso: graphite on paper		1922
1038	38	Six Drawings of Figures with Outstretched Arms	Graphite on paper		1922
1039	39	The Circle of the Lustful: Francesca da Rimini...	Line engraving on paper		1919

In [ ]: