

In [1]:

```
# import lib
import pandas as pd
import numpy as np
```

In [2]:

```
# read csv file
df = pd.read_csv("sets/data.csv")
df
```

Out[2]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Health	2012.0	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	IT Services	2013.0	\$14,026,934	7,429,377 Dollars	6597557	NaN
4	5	Techdrill	Health	NaN	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Health	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	NaN	NaN	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	NaN	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	NaN	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In [3]:

```
# replace
# replace method is used to replace NaN value with another value dynamically
# syntax => DataFrame.replace()
'''
to_replace=None,
value=None,
inplace=False,
limit=None,
regex=False,
method='pad',
'''

df.replace(to_replace='IT Services',value="Micky")
```

Out[3]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	Micky	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Health	2012.0	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	Micky	2013.0	\$14,026,934	7,429,377 Dollars	6597557	NaN
4	5	Techdrill	Health	NaN	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Health	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	NaN	NaN	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	NaN	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	Micky	2011.0	\$14,001,180	NaN	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In [4]:

```
df.replace(to_replace='Government Services',value="Micky")
```

Out[4]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Health	2012.0	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	IT Services	2013.0	\$14,026,934	7,429,377 Dollars	6597557	NaN
4	5	Techdrill	Health	NaN	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Health	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	NaN	NaN	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	NaN	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	NaN	11901180	18%
9	10	Trantraxlax	Micky	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In []:

In [5]:

df

Out[5]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Health	2012.0	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	IT Services	2013.0	\$14,026,934	7,429,377 Dollars	6597557	NaN
4	5	Techdrill	Health	NaN	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Health	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	NaN	NaN	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	NaN	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	NaN	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In [6]:

```
data = df.fillna(method="ffill")
data
```

Out[6]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Health	2012.0	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	IT Services	2013.0	\$14,026,934	7,429,377 Dollars	6597557	7%
4	5	Techdrill	Health	2013.0	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Health	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	Health	2006.0	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	Health	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	3,878,113 Dollars	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In [7]:

```
data.replace(to_replace='Health',value='Hetro')
```

Out[7]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Hetro	2012.0	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	IT Services	2013.0	\$14,026,934	7,429,377 Dollars	6597557	7%
4	5	Techdrill	Hetro	2013.0	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Hetro	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	Hetro	2006.0	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	Hetro	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	3,878,113 Dollars	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In []:

In [10]:

```
# main dataset
data
```

Out[10]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Health	2012.0	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	IT Services	2013.0	\$14,026,934	7,429,377 Dollars	6597557	7%
4	5	Techdrill	Health	2013.0	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Health	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	Health	2006.0	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	Health	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	3,878,113 Dollars	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In []:

In [9]:

```
# same result as to_replace => Another way to write to_replace method
data.replace('Health', 'Hetro')
```

Out[9]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Hetro	2012.0	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	IT Services	2013.0	\$14,026,934	7,429,377 Dollars	6597557	7%
4	5	Techdrill	Hetro	2013.0	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Hetro	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	Hetro	2006.0	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	Hetro	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	3,878,113 Dollars	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In [11]:

```
data.replace(5,50)
```

Out[11]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Health	2012.0	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	IT Services	2013.0	\$14,026,934	7,429,377 Dollars	6597557	7%
4	50	Techdrill	Health	2013.0	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Health	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	Health	2006.0	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	Health	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	3,878,113 Dollars	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In []:

In []:

In [12]:

```
# data
data
```

Out[12]:

ID		Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Health	2012.0	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	IT Services	2013.0	\$14,026,934	7,429,377 Dollars	6597557	7%
4	5	Techdrill	Health	2013.0	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Health	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	Health	2006.0	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	Health	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	3,878,113 Dollars	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In [15]:

```
# replace multiple value with single value
data.replace(['Health', 'Cityace', '20%', 2010], 'Venkat')
```

Out[15]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	Venkat	\$12,329,371	916,455 Dollars	11412916	Venkat
2	3	Canecorporation	Venkat	2012	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	IT Services	2013	\$14,026,934	7,429,377 Dollars	6597557	7%
4	5	Techdrill	Venkat	2013	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Venkat	2006	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Venkat	Venkat	2006	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	Venkat	2009	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011	\$14,001,180	3,878,113 Dollars	11901180	18%
9	10	Trantraxlax	Government Services	2011	\$11,088,336	5,635,276 Dollars	5453060	7%

In []:

In []:

In [16]:

```
# replace multiple value with multiple value data
```

Out[16]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Health	2012.0	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	IT Services	2013.0	\$14,026,934	7,429,377 Dollars	6597557	7%
4	5	Techdrill	Health	2013.0	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Health	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	Health	2006.0	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	Health	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	3,878,113 Dollars	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In [17]:

```
data.replace(['Health', 'Cityace', '20%', 2010], ['Venkat', 'Jobin', 'Yogesh', 'Harish'])
```

Out[17]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	Harish	\$12,329,371	916,455 Dollars	11412916	Yogesh
2	3	Canecorporation	Venkat	2012	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	IT Services	2013	\$14,026,934	7,429,377 Dollars	6597557	7%
4	5	Techdrill	Venkat	2013	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Venkat	2006	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Jobin	Venkat	2006	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	Venkat	2009	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011	\$14,001,180	3,878,113 Dollars	11901180	18%
9	10	Trantraxlax	Government Services	2011	\$11,088,336	5,635,276 Dollars	5453060	7%

In []:

In [18]:

single value of Specific Column
data

Out[18]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Health	2012.0	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	IT Services	2013.0	\$14,026,934	7,429,377 Dollars	6597557	7%
4	5	Techdrill	Health	2013.0	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Health	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	Health	2006.0	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	Health	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	3,878,113 Dollars	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In [19]:

```
data.replace({'Industry': 'Health'}, 'Micky')
```

Out[19]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Micky	2012.0	\$10,597,009	7,591,189 Dollars	3005820	7%
3	4	Mattouch	IT Services	2013.0	\$14,026,934	7,429,377 Dollars	6597557	7%
4	5	Techdrill	Micky	2013.0	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Micky	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	Micky	2006.0	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	Micky	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	3,878,113 Dollars	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In []:

In [20]:

```
# replacing multiple columns
data.replace({'Industry': 'Health', 'Growth': '7%'}, 'Micky')
```

Out[20]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Micky	2012.0	\$10,597,009	7,591,189 Dollars	3005820	Micky
3	4	Mattouch	IT Services	2013.0	\$14,026,934	7,429,377 Dollars	6597557	Micky
4	5	Techdrill	Micky	2013.0	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Micky	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	Micky	2006.0	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	Micky	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	3,878,113 Dollars	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	Micky

In []:

In [23]:

```
# replacing multiple columns
data.replace({'Industry': 'Health', 'Growth': '7%'}, 'Micky')
```

Out[23]:

	ID	Name	Industry	Inception	Revenue	Expenses	Profit	Growth
0	1	Lamtone	IT Services	2009.0	\$11,757,018	6,482,465 Dollars	5274553	30%
1	2	Stripfind	Financial Services	2010.0	\$12,329,371	916,455 Dollars	11412916	20%
2	3	Canecorporation	Micky	2012.0	\$10,597,009	7,591,189 Dollars	3005820	Micky
3	4	Mattouch	IT Services	2013.0	\$14,026,934	7,429,377 Dollars	6597557	Micky
4	5	Techdrill	Micky	2013.0	\$10,573,990	7,435,363 Dollars	3138627	8%
5	6	Techline	Micky	2006.0	\$13,898,119	5,470,303 Dollars	8427816	23%
6	7	Cityace	Micky	2006.0	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	Micky	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	3,878,113 Dollars	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	Micky

In []:

In []: