In [1]:

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

In [2]:

```
# read data set
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 []:

```
# fillna(variable_name)
```

```
# Syntax => DataFrame.fillna(value)
```

In [3]:

df

Out[3]:

	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 [4]:

filling NaN values with zero value df.fillna(0)

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	0
4	5	Techdrill	Health	0.0	\$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	0	0.0	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	0	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	0	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In [5]:

```
11 = [1,2,3,4,5,6,7,8,9,10]
res = 0
for x in l1:
    res += x
res
```

Out[5]:

55

In [6]:

len(11)

Out[6]:

10

In [7]:

res/len(l1)

Out[7]:

5.5

In [8]:

avg = res/len(l1)
avg

Out[8]:

5.5

In [9]:

filling NaN values with zero value
df.fillna(avg)

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	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	5.5
4	5	Techdrill	Health	5.5	\$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	5.5	5.5	\$9,254,614	6,249,498 Dollars	3005116	6%
7	8	Kayelectronics	5.5	2009.0	\$9,451,943	3,878,113 Dollars	5573830	4%
8	9	Ganzlax	IT Services	2011.0	\$14,001,180	5.5	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In []:

In []:

In [20]:

str(avg)+'%'

Out[20]:

'5.5%'

In [21]:

```
# to replace particular column
# we use dict
df.fillna({"Growth":(str(avg)+'%')})
```

Out[21]:

	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	5.5%
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 [23]:

```
# to replace particular column
# replacing multiple column
df.fillna({"Growth":(str(avg)+'%'), "Inception":2007,"Expenses":"9,878,113 Dollars"})
```

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	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	5.5%
4	5	Techdrill	Health	2007.0	\$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	NaN	2007.0	\$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	9,878,113 Dollars	11901180	18%
9	10	Trantraxlax	Government Services	2011.0	\$11,088,336	5,635,276 Dollars	5453060	7%

In []:

In [24]:

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

Out[24]:

	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%