In [1]:
```
!pip install pandas-profiling
```

```
Requirement already satisfied: pandas-profiling in d:\annoconda\lib\site-packages (2.9.0)
Requirement already satisfied: phik>=0.9.10 in d:\annoconda\lib\site-packages (from pandas-profiling) (0.12.2)
Requirement already satisfied: numpy>=1.16.0 in d:\annoconda\lib\site-packages (from pandas-profiling) (1.20.3)
Requirement already satisfied: attrs>=19.3.0 in d:\annoconda\lib\site-packages (from pandas-profiling) (21.2.0)
Requirement already satisfied: tqdm>=4.43.0 in d:\annoconda\lib\site-packages (from pandas-profiling) (4.62.3)
Requirement already satisfied: jinja2>=2.11.1 in d:\annoconda\lib\site-packages (from pandas-profiling) (2.11.3)
Requirement already satisfied: matplotlib>=3.2.0 in d:\annoconda\lib\site-packages (from pandas-profiling) (3.4.3
)
Requirement already satisfied: pandas!=1.0.0,!=1.0.1,!=1.0.2,!=1.1.0,>=0.25.3 in d:\annoconda\lib\site-packages (
from pandas-profiling) (1.3.4)
Requirement already satisfied: joblib in d:\annoconda\lib\site-packages (from pandas-profiling) (1.1.0)
Requirement already satisfied: visions[type_image_path]==0.5.0 in d:\annoconda\lib\site-packages (from pandas-pro
filing) (0.5.0)
Requirement already satisfied: htmlmin>=0.1.12 in d:\annoconda\lib\site-packages (from pandas-profiling) (0.1.12)
Requirement already satisfied: tangled-up-in-unicode>=0.0.6 in d:\annoconda\lib\site-packages (from pandas-profil
ing) (0.2.0)
Requirement already satisfied: ipywidgets>=7.5.1 in d:\annoconda\lib\site-packages (from pandas-profiling) (7.6.5
)
Requirement already satisfied: confuse>=1.0.0 in d:\annoconda\lib\site-packages (from pandas-profiling) (1.7.0)
Requirement already satisfied: missingno>=0.4.2 in d:\annoconda\lib\site-packages (from pandas-profiling) (0.5.1)
Requirement already satisfied: scipy>=1.4.1 in d:\annoconda\lib\site-packages (from pandas-profiling) (1.7.1)
Requirement already satisfied: seaborn>=0.10.1 in d:\annoconda\lib\site-packages (from pandas-profiling) (0.11.2)
Requirement already satisfied: requests>=2.23.0 in c:\users\hp\appdata\roaming\python\python39\site-packages (fro
m pandas-profiling) (2.25.1)
Requirement already satisfied: networkx>=2.4 in d:\annoconda\lib\site-packages (from visions[type_image_path]==0.
5.0->pandas-profiling) (2.6.3)
Requirement already satisfied: Pillow in d:\annoconda\lib\site-packages (from visions[type_image_path]==0.5.0->pa
ndas-profiling) (8.4.0)
Requirement already satisfied: imagehash in d:\annoconda\lib\site-packages (from visions[type_image_path]==0.5.0-
>pandas-profiling) (4.2.1)
Requirement already satisfied: pyyaml in c:\users\hp\appdata\roaming\python\python39\site-packages (from confuse>
=1.0.0->pandas-profiling) (5.4.1)
Requirement already satisfied: widgetsnbextension~=3.5.0 in d:\annoconda\lib\site-packages (from ipywidgets>=7.5.
1->pandas-profiling) (3.5.1)
Requirement already satisfied: traitlets>=4.3.1 in d:\annoconda\lib\site-packages (from ipywidgets>=7.5.1->pandas
-profiling) (5.1.0)
Requirement already satisfied: ipykernel>=4.5.1 in d:\annoconda\lib\site-packages (from ipywidgets>=7.5.1->pandas
-profiling) (6.4.1)
Requirement already satisfied: ipython-genutils~=0.2.0 in d:\annoconda\lib\site-packages (from ipywidgets>=7.5.1-
>pandas-profiling) (0.2.0)
Requirement already satisfied: jupyterlab-widgets>=1.0.0 in d:\annoconda\lib\site-packages (from ipywidgets>=7.5.
1->pandas-profiling) (1.0.0)
Requirement already satisfied: ipython>=4.0.0 in d:\annoconda\lib\site-packages (from ipywidgets>=7.5.1->pandas-p
rofiling) (7.29.0)
Requirement already satisfied: nbformat>=4.2.0 in d:\annoconda\lib\site-packages (from ipywidgets>=7.5.1->pandas-
profiling) (5.1.3)
Requirement already satisfied: debugpy<2.0,>=1.0.0 in d:\annoconda\lib\site-packages (from ipykernel>=4.5.1->ipyw
idgets>=7.5.1->pandas-profiling) (1.4.1)
Requirement already satisfied: tornado<7.0,>=4.2 in d:\annoconda\lib\site-packages (from ipykernel>=4.5.1->ipywid
gets>=7.5.1->pandas-profiling) (6.1)
Requirement already satisfied: matplotlib-inline<0.2.0,>=0.1.0 in d:\annoconda\lib\site-packages (from ipykernel>
=4.5.1->ipywidgets>=7.5.1->pandas-profiling) (0.1.2)
Requirement already satisfied: jupyter-client<8.0 in d:\annoconda\lib\site-packages (from ipykernel>=4.5.1->ipywi
dgets>=7.5.1->pandas-profiling) (6.1.12)
Requirement already satisfied: setuptools>=18.5 in d:\annoconda\lib\site-packages (from ipython>=4.0.0->ipywidget
s>=7.5.1->pandas-profiling) (58.0.4)
Requirement already satisfied: pickleshare in d:\annoconda\lib\site-packages (from ipython>=4.0.0->ipywidgets>=7.
5.1->pandas-profiling) (0.7.5)
Requirement already satisfied: backcall in d:\annoconda\lib\site-packages (from ipython>=4.0.0->ipywidgets>=7.5.1
->pandas-profiling) (0.2.0)
Requirement already satisfied: colorama in d:\annoconda\lib\site-packages (from ipython>=4.0.0->ipywidgets>=7.5.1
->pandas-profiling) (0.4.4)
Requirement already satisfied: prompt-toolkit!=3.0.0,!=3.0.1,<3.1.0,>=2.0.0 in d:\annoconda\lib\site-packages (fr
om ipython>=4.0.0->ipywidgets>=7.5.1->pandas-profiling) (3.0.20)
Requirement already satisfied: jedi>=0.16 in d:\annoconda\lib\site-packages (from ipython>=4.0.0->ipywidgets>=7.5
.1->pandas-profiling) (0.18.0)
Requirement already satisfied: decorator in d:\annoconda\lib\site-packages (from ipython>=4.0.0->ipywidgets>=7.5.
1->pandas-profiling) (5.1.0)
Requirement already satisfied: pygments in d:\annoconda\lib\site-packages (from ipython>=4.0.0->ipywidgets>=7.5.1
->pandas-profiling) (2.10.0)
Requirement already satisfied: parso<0.9.0,>=0.8.0 in d:\annoconda\lib\site-packages (from jedi>=0.16->ipython>=4
.0.0->ipywidgets>=7.5.1->pandas-profiling) (0.8.2)
Requirement already satisfied: MarkupSafe>=0.23 in d:\annoconda\lib\site-packages (from jinja2>=2.11.1->pandas-pr
ofiling) (2.0.1)
Requirement already satisfied: python-dateutil>=2.1 in d:\annoconda\lib\site-packages (from jupyter-client<8.0->ip
ykernel>=4.5.1->ipywidgets>=7.5.1->pandas-profiling) (2.8.2)
Requirement already satisfied: pyzmq>=13 in d:\annoconda\lib\site-packages (from jupyter-client<8.0->ipykernel>=4
.5.1->ipywidgets>=7.5.1->pandas-profiling) (22.2.1)
Requirement already satisfied: jupyter-core>=4.6.0 in d:\annoconda\lib\site-packages (from jupyter-client<8.0->ip
ykernel>=4.5.1->ipywidgets>=7.5.1->pandas-profiling) (4.8.1)
Requirement already satisfied: pywin32>=1.0 in d:\annoconda\lib\site-packages (from jupyter-core>=4.6.0->jupyter-
client<8.0->ipykernel>=4.5.1->ipywidgets>=7.5.1->pandas-profiling) (228)
Requirement already satisfied: cycler>=0.10 in d:\annoconda\lib\site-packages (from matplotlib>=3.2.0->pandas-pro
filing) (0.10.0)
Requirement already satisfied: pyparsing>=2.2.1 in d:\annoconda\lib\site-packages (from matplotlib>=3.2.0->pandas
```

```
-profiling) (3.0.4)
Requirement already satisfied: kiwisolver>=1.0.1 in d:\annoconda\lib\site-packages (from matplotlib>=3.2.0->panda
s-profiling) (1.3.1)
Requirement already satisfied: six in d:\annoconda\lib\site-packages (from cycler>=0.10->matplotlib>=3.2.0->panda
s-profiling) (1.16.0)
Requirement already satisfied: jsonschema!=2.5.0,>=2.4 in d:\annoconda\lib\site-packages (from nbformat>=4.2.0->i
pywidgets>=7.5.1->pandas-profiling) (3.2.0)
Requirement already satisfied: pyrsistent>=0.14.0 in d:\annoconda\lib\site-packages (from jsonschema!=2.5.0,>=2.4
->nbformat>=4.2.0->ipywidgets>=7.5.1->pandas-profiling) (0.18.0)
Requirement already satisfied: pytz>=2017.3 in d:\annoconda\lib\site-packages (from pandas!=1.0.0,!=1.0.1,!=1.0.2
,!=1.1.0,>=0.25.3->pandas-profiling) (2021.3)
Requirement already satisfied: wcwidth in d:\annoconda\lib\site-packages (from prompt-toolkit!=3.0.0,!=3.0.1,<3.1
.0,>=2.0.0->ipython>=4.0.0->ipywidgets>=7.5.1->pandas-profiling) (0.2.5)
Requirement already satisfied: idna<3,>=2.5 in c:\users\hp\appdata\roaming\python\python39\site-packages (from re
quests>=2.23.0->pandas-profiling) (2.10)
Requirement already satisfied: certifi>=2017.4.17 in d:\annoconda\lib\site-packages (from requests>=2.23.0->panda
s-profiling) (2021.10.8)
Requirement already satisfied: chardet<5,>=3.0.2 in d:\annoconda\lib\site-packages (from requests>=2.23.0->pandas
-profiling) (4.0.0)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in d:\annoconda\lib\site-packages (from requests>=2.23.0->pa
ndas-profiling) (1.26.7)
Requirement already satisfied: notebook>=4.4.1 in d:\annoconda\lib\site-packages (from widgetsnbextension~=3.5.0-
>ipywidgets>=7.5.1->pandas-profiling) (6.4.5)
Requirement already satisfied: nbconvert in d:\annoconda\lib\site-packages (from notebook>=4.4.1->widgetsnbextens
ion~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (6.1.0)
Requirement already satisfied: argon2-cffi in d:\annoconda\lib\site-packages (from notebook>=4.4.1->widgetsnbexte
nsion~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (20.1.0)
Requirement already satisfied: Send2Trash>=1.5.0 in d:\annoconda\lib\site-packages (from notebook>=4.4.1->widgets
nbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (1.8.0)
Requirement already satisfied: terminado>=0.8.3 in d:\annoconda\lib\site-packages (from notebook>=4.4.1->widgetsn
bextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (0.9.4)
Requirement already satisfied: prometheus-client in d:\annoconda\lib\site-packages (from notebook>=4.4.1->widgets
nbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (0.11.0)
Requirement already satisfied: pywinpty>=0.5 in d:\annoconda\lib\site-packages (from terminado>=0.8.3->notebook>=
4.4.1->widgetsnbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (0.5.7)
Requirement already satisfied: cffi>=1.0.0 in d:\annoconda\lib\site-packages (from argon2-cffi->notebook>=4.4.1->
widgetsnbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (1.14.6)
Requirement already satisfied: pycparser in d:\annoconda\lib\site-packages (from cffi>=1.0.0->argon2-cffi->notebo
ok>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (2.20)
Requirement already satisfied: PyWavelets in d:\annoconda\lib\site-packages (from imagehash->visions[type_image_p
ath]==0.5.0->pandas-profiling) (1.1.1)
Requirement already satisfied: mistune<2,>=0.8.1 in d:\annoconda\lib\site-packages (from nbconvert->notebook>=4.4
.1->widgetsnbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (0.8.4)
Requirement already satisfied: testpath in d:\annoconda\lib\site-packages (from nbconvert->notebook>=4.4.1->widge
tsnbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (0.5.0)
Requirement already satisfied: entrypoints>=0.2.2 in d:\annoconda\lib\site-packages (from nbconvert->notebook>=4.
4.1->widgetsnbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (0.3)
Requirement already satisfied: nbclient<0.6.0,>=0.5.0 in d:\annoconda\lib\site-packages (from nbconvert->notebook
>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (0.5.3)
Requirement already satisfied: defusedxml in d:\annoconda\lib\site-packages (from nbconvert->notebook>=4.4.1->wid
getsnbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (0.7.1)
Requirement already satisfied: jupyterlab-pygments in d:\annoconda\lib\site-packages (from nbconvert->notebook>=4
.4.1->widgetsnbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (0.1.2)
Requirement already satisfied: pandocfilters>=1.4.1 in d:\annoconda\lib\site-packages (from nbconvert->notebook>=
4.4.1->widgetsnbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (1.4.3)
Requirement already satisfied: bleach in d:\annoconda\lib\site-packages (from nbconvert->notebook>=4.4.1->widgets
nbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (4.0.0)
Requirement already satisfied: nest-asyncio in d:\annoconda\lib\site-packages (from nbclient<0.6.0,>=0.5.0->nbcon
vert->notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (1.5.1)
Requirement already satisfied: async-generator in d:\annoconda\lib\site-packages (from nbclient<0.6.0,>=0.5.0->nb
convert->notebook>=4.4.1->widgetsnbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (1.10)
Requirement already satisfied: webencodings in d:\annoconda\lib\site-packages (from bleach->nbconvert->notebook>=
4.4.1->widgetsnbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (0.5.1)
Requirement already satisfied: packaging in d:\annoconda\lib\site-packages (from bleach->nbconvert->notebook>=4.4
.1->widgetsnbextension~=3.5.0->ipywidgets>=7.5.1->pandas-profiling) (21.0)
```

In [2]:
```
import numpy as np
import pandas as pd
import seaborn as sns
```

In [3]:
```
df=pd.read_csv("E:\FitBit data.csv")
```

In [4]:
```
df.head()
```

Out[4]:

	Id	ActivityDate	TotalSteps	TotalDistance	TrackerDistance	LoggedActivitiesDistance	VeryActiveDistance	ModeratelyActiveDistance
0	1503960366	3/25/2016	11004	7.11	7.11	0.0	2.57	0.46
1	1503960366	3/26/2016	17609	11.55	11.55	0.0	6.92	0.73
2	1503960366	3/27/2016	12736	8.53	8.53	0.0	4.66	0.16
3	1503960366	3/28/2016	13231	8.93	8.93	0.0	3.19	0.79

4	1503960366	3/29/2016	12041	7.85	7.85	0.0	2.16	1.09

EDA by Pandas Profiling

In [ ]:

In [7]:
```
from pandas_profiling import ProfileReport
prof=ProfileReport(df)
prof.to_file(output_file='output.html')
```

In [8]:
```
from pandas_profiling import profile_report
df.profile_report()
```

Overview

Dataset statistics

Number of variables	15
Number of observations	457
Missing cells	0
Missing cells (%)	0.0%
Duplicate rows	0
Duplicate rows (%)	0.0%
Total size in memory	53.7 KiB
Average record size in memory	120.3 B

Variable types

NUM	14
CAT	1

Warnings

`TotalDistance` is highly correlated with `TotalSteps` and 1 other fields (TotalSteps, TrackerDistance)	**High correlation**
`TotalSteps` is highly correlated with `TotalDistance` and 1 other fields (TotalDistance, TrackerDistance)	**High correlation**
`TrackerDistance` is highly correlated with `TotalSteps` and 1 other fields (TotalSteps, TotalDistance)	**High correlation**
`TotalSteps` has 61 (13.3%) zeros	**Zeros**
`TotalDistance` has 63 (13.8%) zeros	**Zeros**

Out[8]:

EDA STEP BY STEP

In [9]:
```
df.isna().sum()
```

Out[9]:
```
Id                          0
ActivityDate                0
TotalSteps                  0
TotalDistance               0
TrackerDistance             0
LoggedActivitiesDistance    0
VeryActiveDistance          0
ModeratelyActiveDistance    0
LightActiveDistance         0
SedentaryActiveDistance     0
VeryActiveMinutes           0
FairlyActiveMinutes         0
LightlyActiveMinutes        0
SedentaryMinutes            0
Calories                    0
dtype: int64
```

In [11]:
```
df.ActivityDate.unique()
```

Out[11]:
```
array(['3/25/2016', '3/26/2016', '3/27/2016', '3/28/2016', '3/29/2016',
       '3/30/2016', '3/31/2016', '4/1/2016', '4/2/2016', '4/3/2016',
       '4/4/2016', '4/5/2016', '4/6/2016', '4/7/2016', '4/8/2016',
       '4/9/2016', '4/10/2016', '4/11/2016', '4/12/2016', '3/12/2016',
       '3/13/2016', '3/14/2016', '3/15/2016', '3/16/2016', '3/17/2016',
       '3/18/2016', '3/19/2016', '3/20/2016', '3/21/2016', '3/22/2016',
       '3/23/2016', '3/24/2016'], dtype=object)
```

In [15]:
```
df['Date']=pd.DatetimeIndex(df['ActivityDate'])
```

In [17]:
```
df.drop('date',axis=1,inplace=True)
```

In [18]:
```
df.head(2)
```

Out[18]:

	Id	ActivityDate	TotalSteps	TotalDistance	TrackerDistance	LoggedActivitiesDistance	VeryActiveDistance	ModeratelyActiveDistance
0	1503960366	3/25/2016	11004	7.11	7.11	0.0	2.57	0.46
1	1503960366	3/26/2016	17609	11.55	11.55	0.0	6.92	0.73

In [19]:
```
df['Year']=pd.DatetimeIndex(df['ActivityDate']).year
df['Month']=pd.DatetimeIndex(df['ActivityDate']).month
df['Day']=pd.DatetimeIndex(df['ActivityDate']).day
```

In [20]:
```
df.head(2)
```

Out[20]:

	Id	ActivityDate	TotalSteps	TotalDistance	TrackerDistance	LoggedActivitiesDistance	VeryActiveDistance	ModeratelyActiveDistance
0	1503960366	3/25/2016	11004	7.11	7.11	0.0	2.57	0.46
1	1503960366	3/26/2016	17609	11.55	11.55	0.0	6.92	0.73

In [23]:
```
df[['ActivityDate','Day','Month','Year']].head()
```

Out[23]:

	ActivityDate	Day	Month	Year
0	3/25/2016	25	3	2016
1	3/26/2016	26	3	2016
2	3/27/2016	27	3	2016
3	3/28/2016	28	3	2016
4	3/29/2016	29	3	2016

In [25]:

```
df.drop(['ActivityDate'],axis=1).head()
```

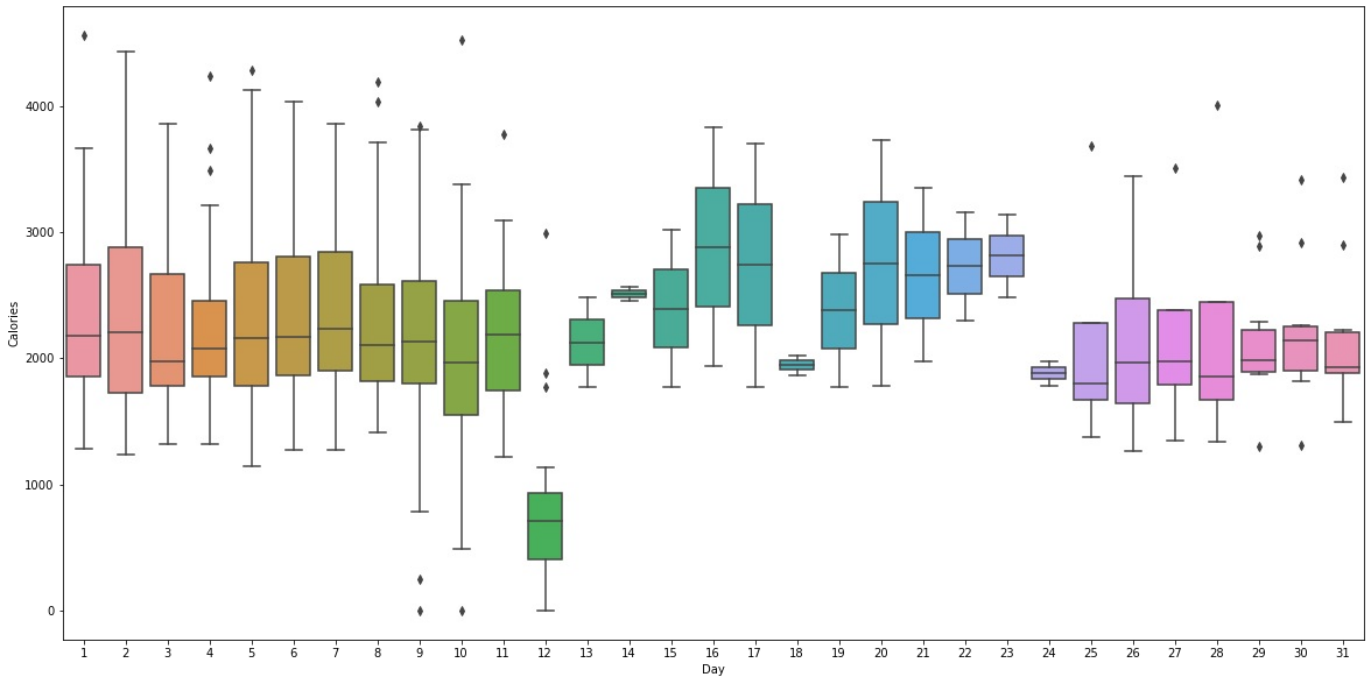
Out[25]:

	Id	TotalSteps	TotalDistance	TrackerDistance	LoggedActivitiesDistance	VeryActiveDistance	ModeratelyActiveDistance	LightActiveD
0	1503960366	11004	7.11	7.11	0.0	2.57	0.46	
1	1503960366	17609	11.55	11.55	0.0	6.92	0.73	
2	1503960366	12736	8.53	8.53	0.0	4.66	0.16	
3	1503960366	13231	8.93	8.93	0.0	3.19	0.79	
4	1503960366	12041	7.85	7.85	0.0	2.16	1.09	

In [26]:
```
import matplotlib.pyplot as plt
```

In [29]:
```
plt.figure(figsize=(20,10))
sns.boxplot(x='Day',y='Calories',data=df)
```

Out[29]:
```
<AxesSubplot:xlabel='Day', ylabel='Calories'>
```



In [30]:
```
df['Week']=pd.DatetimeIndex(df['ActivityDate']).week
```

```
C:\Users\hp\AppData\Local\Temp/ipykernel_11492/1452975531.py:1: FutureWarning: weekofyear and week have been deprecated, please use DatetimeIndex.isocalendar().week instead, which returns a Series.  To exactly reproduce the behavior of week and weekofyear and return an Index, you may call pd.Int64Index(idx.isocalendar().week)
  df['Week']=pd.DatetimeIndex(df['ActivityDate']).week
```

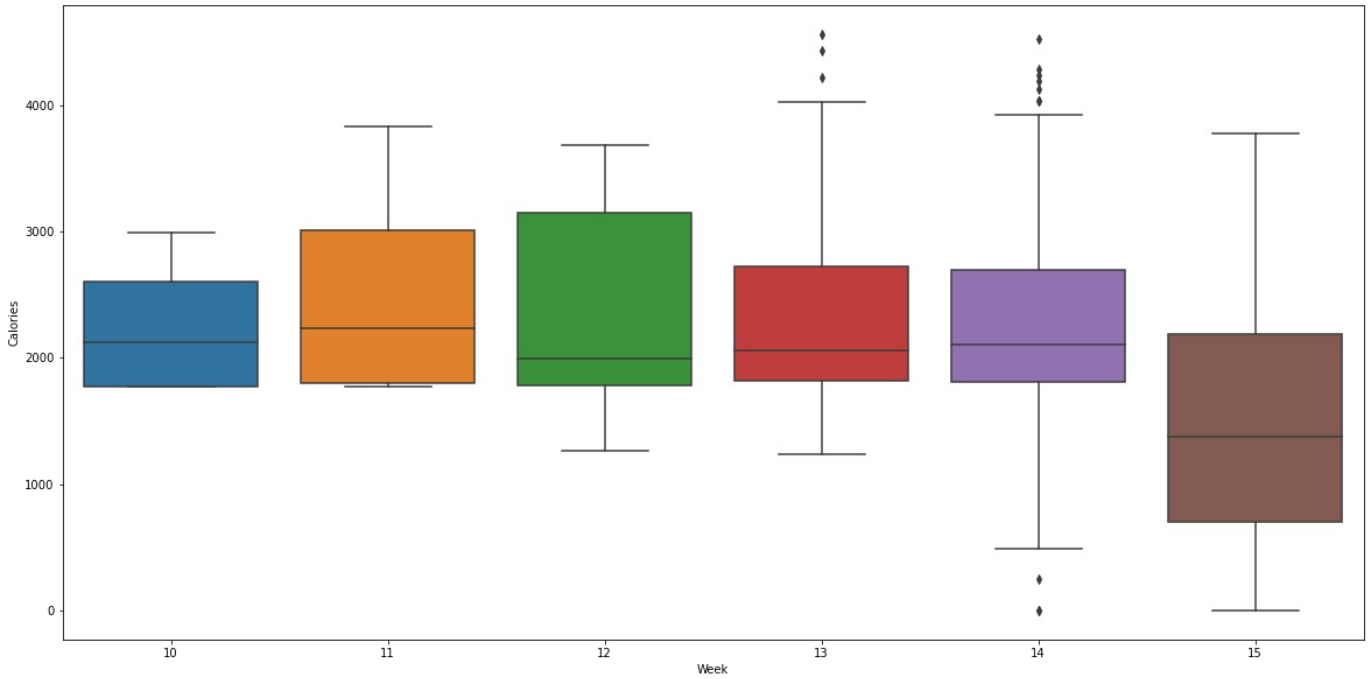
In [31]:
```
df.head(2)
```

Out[31]:

	Id	ActivityDate	TotalSteps	TotalDistance	TrackerDistance	LoggedActivitiesDistance	VeryActiveDistance	ModeratelyActiveDistance
0	1503960366	3/25/2016	11004	7.11	7.11	0.0	2.57	0.46
1	1503960366	3/26/2016	17609	11.55	11.55	0.0	6.92	0.73

In [32]:
```
plt.figure(figsize=(20,10))
sns.boxplot(x='Week',y='Calories',data=df)
```

Out[32]:
```
<AxesSubplot:xlabel='Week', ylabel='Calories'>
```



In [33]:
```
df['Day_Name']=pd.DatetimeIndex(df['ActivityDate']).day_name()
```

In [34]:
```
df.head(2)
```

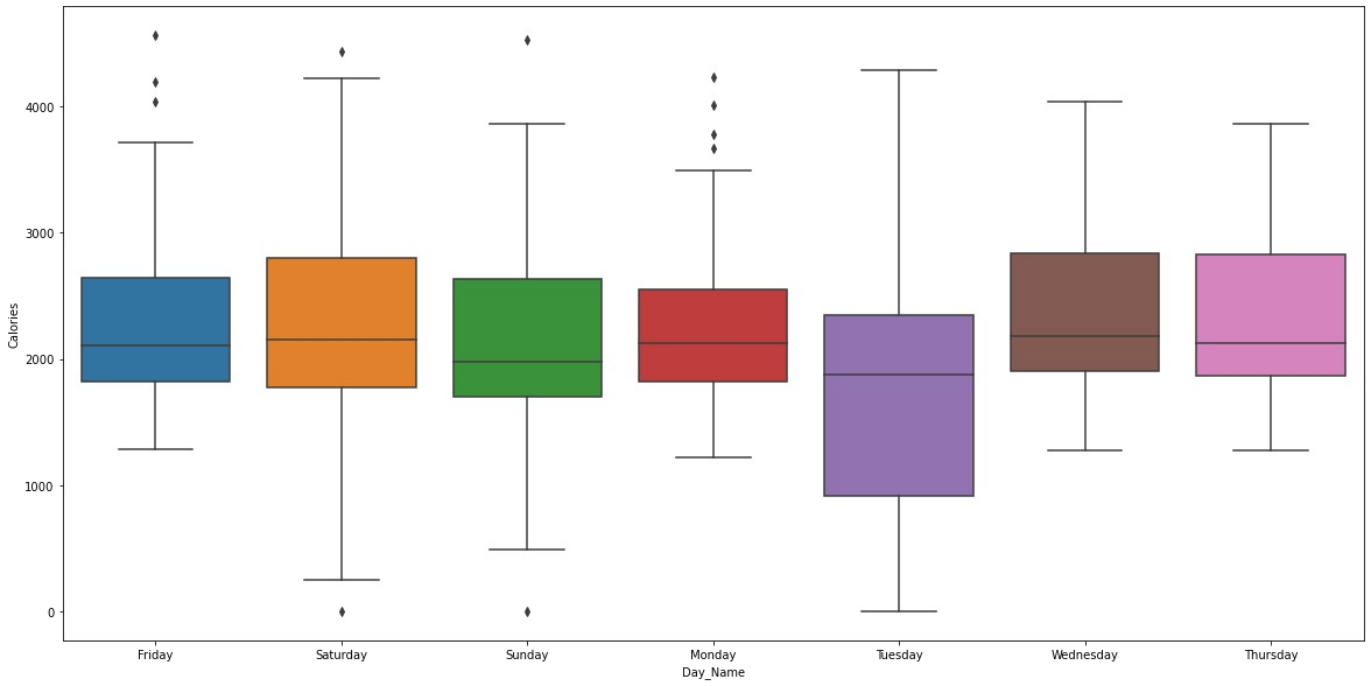
Out[34]:

	Id	ActivityDate	TotalSteps	TotalDistance	TrackerDistance	LoggedActivitiesDistance	VeryActiveDistance	ModeratelyActiveDistance
0	1503960366	3/25/2016	11004	7.11	7.11	0.0	2.57	0.46
1	1503960366	3/26/2016	17609	11.55	11.55	0.0	6.92	0.73

2 rows × 21 columns

In [35]:
```
plt.figure(figsize=(20,10))
sns.boxplot(x='Day_Name',y='Calories',data=df)
```

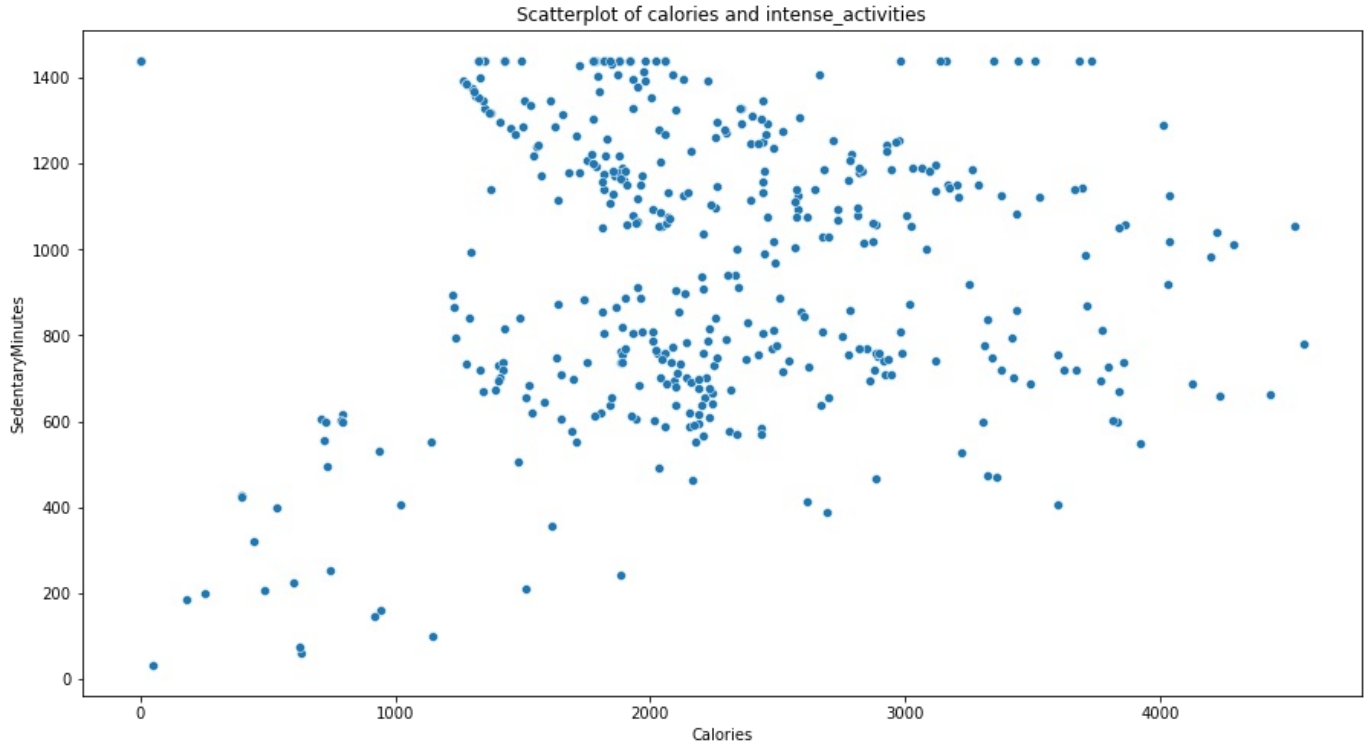
Out[35]:
```
<AxesSubplot:xlabel='Day_Name', ylabel='Calories'>
```



In [37]:
```
plt.figure(figsize=(15,8))
```

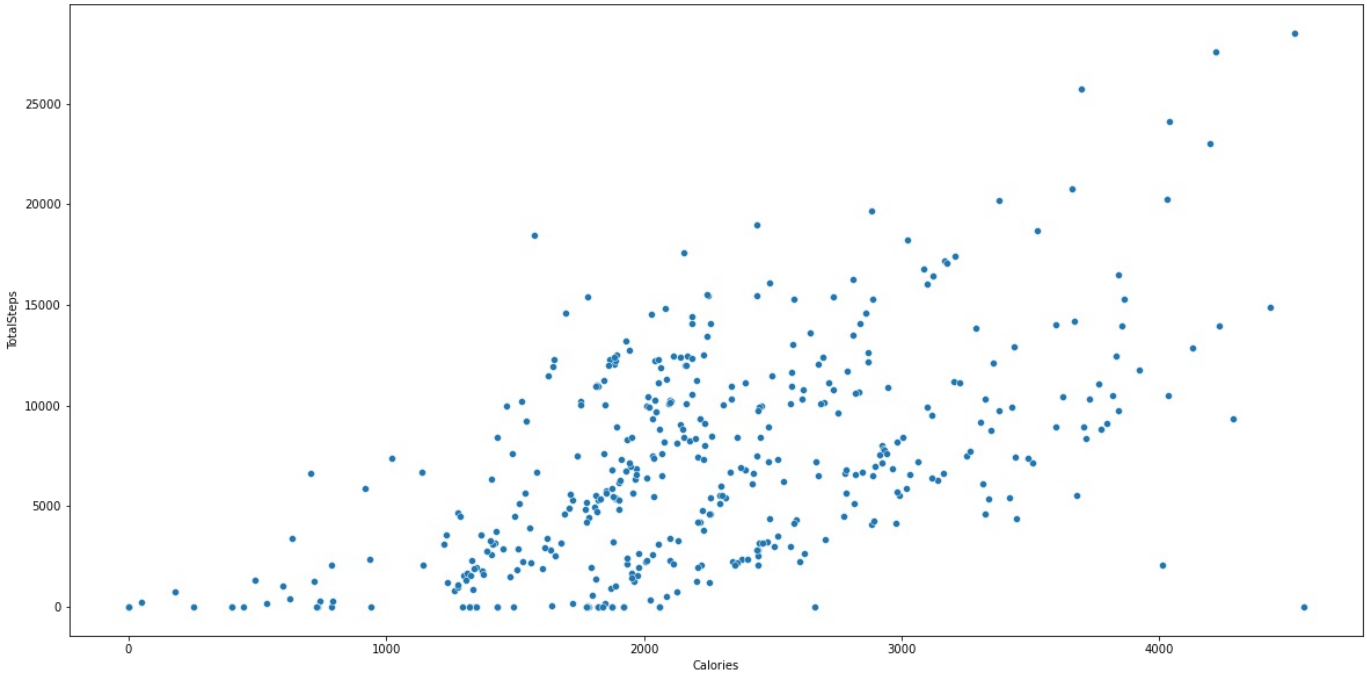
```
ax = sns.scatterplot(x='Calories', y='SedentaryMinutes', data=df)

ax.set_title('Scatterplot of calories and intense_activities')
```

Out[37]:
```
Text(0.5, 1.0, 'Scatterplot of calories and intense_activities')
```



In [38]:
```
plt.figure(figsize=(20,10))
sns.scatterplot(x='Calories',y='TotalSteps',data=df)
```

Out[38]:
```
<AxesSubplot:xlabel='Calories', ylabel='TotalSteps'>
```

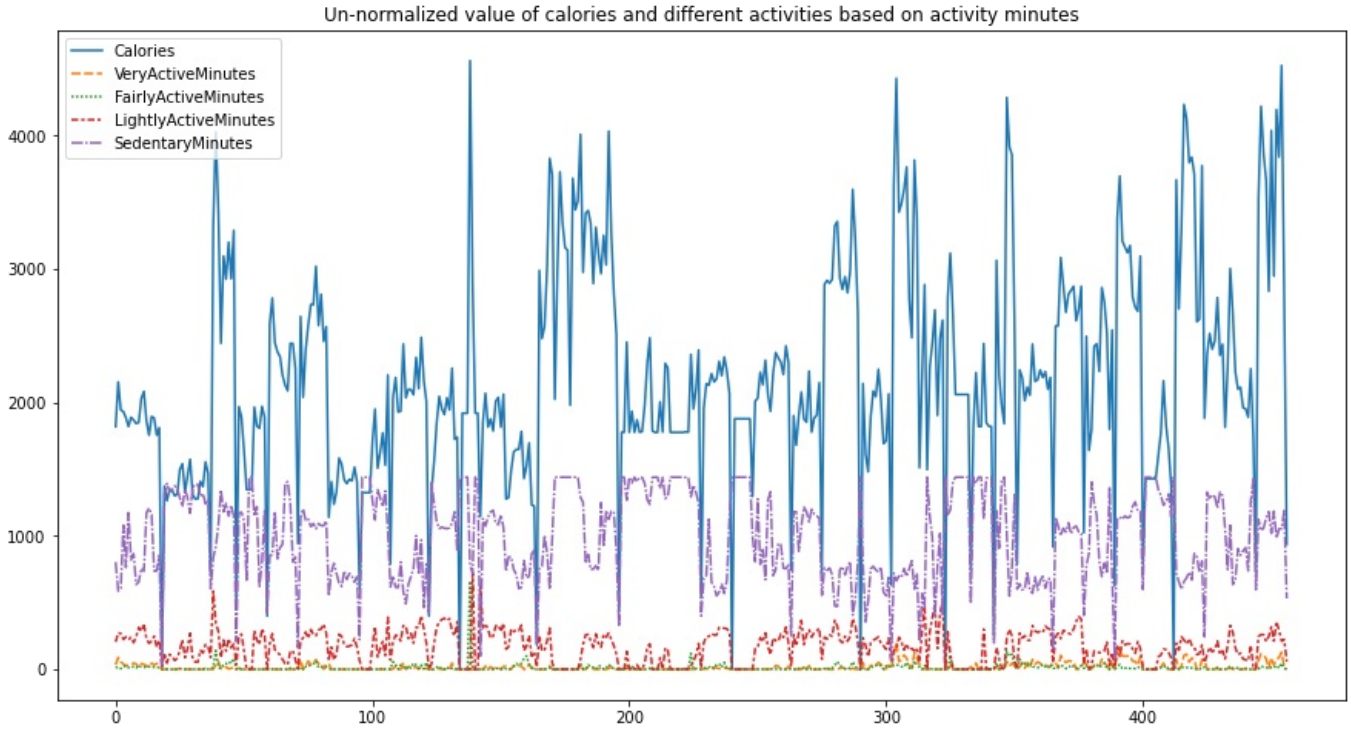


In [41]:
```
plt.figure(figsize=(20,20))
col_select = ['Calories','VeryActiveMinutes','FairlyActiveMinutes','LightlyActiveMinutes','SedentaryMinutes']
wide_df = df[col_select]

# figure size
plt.figure(figsize=(15,8))

# timeseries plot using lineplot
```

```
ax = sns.lineplot(data=wide_df)

ax.set_title('Un-normalized value of calories and different activities based on activity minutes')
```

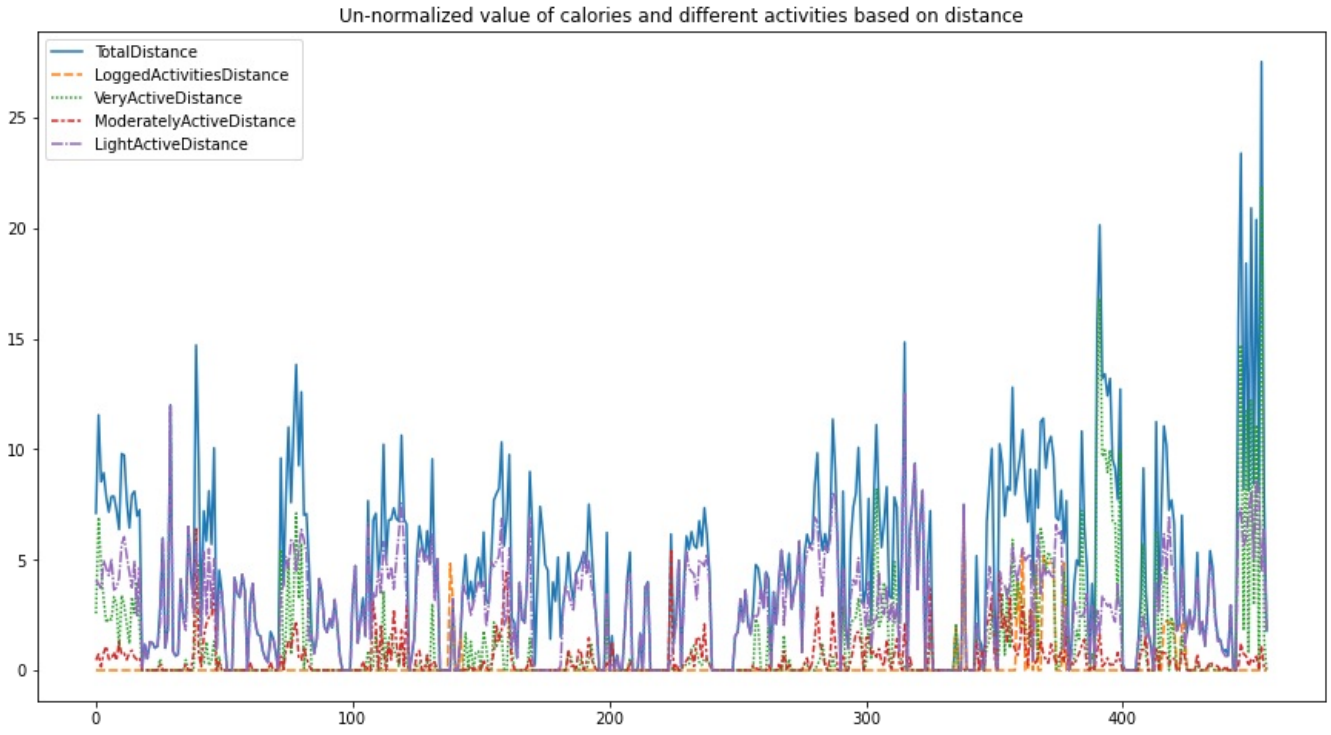
Out[41]:
```
Text(0.5, 1.0, 'Un-normalized value of calories and different activities based on activity minutes')
```

```
<Figure size 1440x1440 with 0 Axes>
```



In [42]:
```
rol_select = ['TotalDistance','LoggedActivitiesDistance','VeryActiveDistance','ModeratelyActiveDistance', 'LightA
wide_df1 = df[rol_select]

# figure size
plt.figure(figsize=(15,8))

# timeseries plot using lineplot
ax = sns.lineplot(data=wide_df1)

ax.set_title('Un-normalized value of calories and different activities based on distance')
```

Out[42]:
```
Text(0.5, 1.0, 'Un-normalized value of calories and different activities based on distance')
```



The EDA here gives us the insight about the relation between the active hours, the distance for which the user has moderate and intense activity and the calories burnt during that period.

In [ ]: