Import all the needes packages

```
In [6]: import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import sklearn
import sklearn.datasets
#import tensorflow as tf
#import tensorflow_datasets as tfds
```

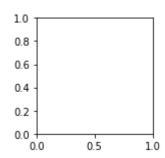
Let's load a fes datasets from those available in sklean_dataset package

```
In [12]: digits = sklearn.datasets.load_digits()
```

```
In [13]: | figure = plt.figure(figsize=(12,6))
         for i in range (1,11):
             image = np.array(digits['images'][i], dtype='float')
             figure.add subplot(2,5,i)
             plt.imshow(image, cmap='Blue')
         plt.show
         ValueError
                                                    Traceback (most recent call last)
         <ipython-input-13-8508d62c7efc> in <module>
                     image = np.array(digits['images'][i], dtype='float')
                     figure.add subplot(2,5,i)
               4
                     plt.imshow(image, cmap='Blue')
         ---> 5
               6 plt.show
         ~\AppData\Local\Continuum\anaconda3\lib\site-packages\matplotlib\pyplot.py in i
         mshow(X, cmap, norm, aspect, interpolation, alpha, vmin, vmax, origin, extent,
          shape, filternorm, filterrad, imlim, resample, url, data, **kwargs)
                         filternorm=filternorm, filterrad=filterrad, imlim=imlim,
            2681
            2682
                         resample=resample, url=url, **({"data": data} if data is not
         -> 2683
                         None else {}), **kwargs)
                     sci( ret)
            2684
            2685
                     return __ret
         ~\AppData\Local\Continuum\anaconda3\lib\site-packages\matplotlib\ init .py in
         inner(ax, data, *args, **kwargs)
                     def inner(ax, *args, data=None, **kwargs):
            1599
            1600
                         if data is None:
         -> 1601
                              return func(ax, *map(sanitize_sequence, args), **kwargs)
            1602
            1603
                         bound = new sig.bind(ax, *args, **kwargs)
         ~\AppData\Local\Continuum\anaconda3\lib\site-packages\matplotlib\cbook\deprecat
         ion.py in wrapper(*args, **kwargs)
             367
                                  f"%(removal)s. If any parameter follows {name!r}, they
             368
                                  f"should be pass as keyword, not positionally.")
         --> 369
                         return func(*args, **kwargs)
             370
             371
                     return wrapper
         ~\AppData\Local\Continuum\anaconda3\lib\site-packages\matplotlib\cbook\deprecat
         ion.py in wrapper(*args, **kwargs)
             367
                                  f"%(removal)s. If any parameter follows {name!r}, they
                                 f"should be pass as keyword, not positionally.")
             368
         --> 369
                         return func(*args, **kwargs)
             370
             371
                     return wrapper
         ~\AppData\Local\Continuum\anaconda3\lib\site-packages\matplotlib\axes\ axes.py
          in imshow(self, X, cmap, norm, aspect, interpolation, alpha, vmin, vmax, origi
         n, extent, shape, filternorm, filterrad, imlim, resample, url, **kwargs)
            5667
                         im = mimage.AxesImage(self, cmap, norm, interpolation, origin,
          extent,
            5668
                                                filternorm=filternorm, filterrad=filterra
```

```
d,
-> 5669
                                       resample=resample, **kwargs)
   5670
   5671
                im.set data(X)
~\AppData\Local\Continuum\anaconda3\lib\site-packages\matplotlib\image.py in __
init (self, ax, cmap, norm, interpolation, origin, extent, filternorm, filtern
ad, resample, **kwargs)
    862
                    filterrad=filterrad,
    863
                    resample=resample,
--> 864
                    **kwargs
    865
                )
    866
~\AppData\Local\Continuum\anaconda3\lib\site-packages\matplotlib\image.py in _
init (self, ax, cmap, norm, interpolation, origin, filternorm, filterrad, resa
mple, **kwargs)
    205
                martist.Artist.__init__(self)
    206
--> 207
                cm.ScalarMappable.__init__(self, norm, cmap)
                self. mouseover = True
    208
    209
                if origin is None:
~\AppData\Local\Continuum\anaconda3\lib\site-packages\matplotlib\cm.py in __ini
t__(self, norm, cmap)
    216
                self.norm = norm
    217
                #: The Colormap instance of this ScalarMappable.
--> 218
                self.cmap = get cmap(cmap)
                #: The last colorbar associated with this ScalarMappable. May b
    219
e None.
    220
                self.colorbar = None
~\AppData\Local\Continuum\anaconda3\lib\site-packages\matplotlib\cm.py in get c
map(name, lut)
    181
                raise ValueError(
                    "Colormap %s is not recognized. Possible values are: %s"
    182
--> 183
                    % (name, ', '.join(sorted(cmap_d))))
    184
    185
```

ValueError: Colormap Blue is not recognized. Possible values are: Accent, Accen t r, Blues, Blues r, BrBG, BrBG r, BuGn, BuGn r, BuPu, BuPu r, CMRmap, CMRmap r, Dark2, Dark2_r, GnBu, GnBu_r, Greens, Greens_r, Greys, Greys_r, OrRd, OrRd_ r, Oranges, Oranges r, PRGn, PRGn r, Paired, Paired r, Pastell, Pastell r, Past el2, Pastel2_r, PiYG, PiYG_r, PuBu, PuBuGn, PuBuGn_r, PuBu_r, PuOr, PuOr_r, PuR d, PuRd_r, Purples, Purples_r, RdBu, RdBu_r, RdGy, RdGy_r, RdPu, RdPu_r, RdYlB u, RdYlBu_r, RdYlGn, RdYlGn_r, Reds, Reds_r, Set1, Set1_r, Set2, Set2_r, Set3, Set3_r, Spectral, Spectral_r, Wistia, Wistia_r, YlGn, YlGnBu, YlGnBu_r, YlGn_ r, YlOrBr, YlOrRd_r, afmhot, afmhot_r, autumn, autumn_r, bina ry, binary_r, bone, bone_r, brg, brg_r, bwr, bwr_r, cividis, cividis_r, cool, c ool r, coolwarm, coolwarm r, copper, copper r, cubehelix, cubehelix r, flag, fl ag_r, gist_earth, gist_earth_r, gist_gray, gist_gray_r, gist_heat, gist_heat_r, gist_ncar, gist_ncar_r, gist_rainbow, gist_rainbow_r, gist_stern, gist_stern_r, gist_yarg, gist_yarg_r, gnuplot, gnuplot2, gnuplot2_r, gnuplot_r, gray, gray_r, hot, hot_r, hsv, hsv_r, inferno, inferno_r, jet, jet_r, magma, magma_r, nipy_sp ectral, nipy_spectral_r, ocean, ocean_r, pink, pink_r, plasma, plasma_r, prism, prism r, rainbow, rainbow r, seismic, seismic r, spring, spring r, summer, summ er_r, tab10, tab10_r, tab20, tab20_r, tab20b, tab20b_r, tab20c, tab20c_r, terra in, terrain_r, twilight, twilight_r, twilight_shifted, twilight_shifted_r, viridis, viridis_r, winter, winter_r



In []: