In [1]:
```
#Matplotlib is a plotting library for the Python programming language.
#Matplotlib tries to make easy things easy and hard things possible. You can generate plots, histogr
ams, power spectra, bar charts, errorcharts, scatterplots, etc.
```

In [3]:
```
import numpy as np
```

In [4]:
```
import pandas as pd
```

In [5]:
```
import matplotlib.pyplot as plt
```

In [6]:
```
x=np.linspace(0,6,9)
```

In [7]:
```
x
```

Out[7]:
```
array([0.  , 0.75, 1.5 , 2.25, 3.  , 3.75, 4.5 , 5.25, 6.  ])
```

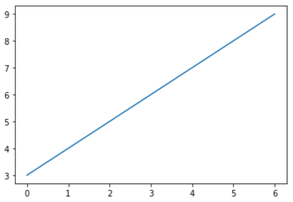
In [8]:
```
y=np.linspace(3,9,9)
```

In [9]:
```
y
```

Out[9]:
```
array([3.  , 3.75, 4.5 , 5.25, 6.  , 6.75, 7.5 , 8.25, 9.  ])
```

In [10]:
```
plt.plot(x,y)
```

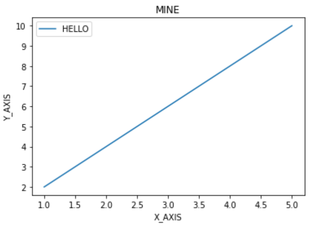
Out[10]:
```
[<matplotlib.lines.Line2D at 0x116e6f50>]
```



In [11]:
```
#plt.legend()--When there are multiple curves in the graph,legen gives you easy identification of th
e curve to that respective label
```

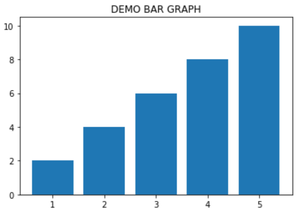
In [4]:
```
plt.plot([1,2,3,4,5],[2,4,6,8,10],label='HELLO')
plt.xlabel("X_AXIS")
plt.ylabel('Y_AXIS')
plt.title("MINE")
plt.legend()
```

Out[4]:
```
<matplotlib.legend.Legend at 0x52422f0>
```



In [13]:
```
plt.bar([1,2,3,4,5],[2,4,6,8,10],label='DEMO')
plt.title("DEMO BAR GRAPH")
```

Out[13]:
```
Text(0.5, 1.0, 'DEMO BAR GRAPH')
```



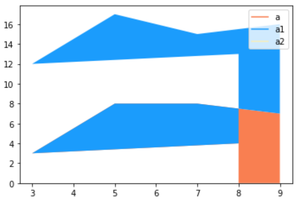
In [ ]:
```

```

In [27]:
```
a=[9,7,5,3,8]
a1=[7,8,8,3,4]
a2=[9,7,9,9,9]
```

In [33]:
```
plt.plot([],[],color='#F97F51',label='a')
plt.plot([],[],color='#1B9CFC',label='a1')
plt.plot([],[],color='#F8EFBA',label='a2')
plt.stackplot(a,a1,a2,colors=['#F97F51','#1B9CFC','#F8EFBA'])
plt.legend()
```

Out[33]:
```
<matplotlib.legend.Legend at 0x134736f0>
```



In [ ]:
```
#piechart
```

In [16]:
```
mlabels=['fb','twitter','insta']
```

In [17]:
```
piecolors=['#F97F51','#1B9CFC','#FD7272']
```

In [31]:
```
plt.pie(ads,labels=mlabels,colors=piecolors,explode=(0,0,0))
```

Out[31]:
```
([<matplotlib.patches.Wedge at 0x134129b0>,
  <matplotlib.patches.Wedge at 0x13412c10>,
  <matplotlib.patches.Wedge at 0x13412e50>],
 [Text(0.2447730130080499, 1.0724207066739067, 'fb'),
  Text(-0.9088626158329182, -0.6196521165471361, 'twitter'),
  Text(0.8063571273955387, -0.7481899378489497, 'insta')])
```

In [35]:
```
plt.pie(ads,labels=mlabels,colors=piecolors,explode=(0,0.1,0))
```

Out[35]:
```
([<matplotlib.patches.Wedge at 0x133492f0>,
  <matplotlib.patches.Wedge at 0x133494d0>,
  <matplotlib.patches.Wedge at 0x13349770>],
 [Text(0.2447730130080499, 1.0724207066739067, 'fb'),
  Text(-0.991486489999547, -0.6759841271423304, 'twitter'),
  Text(0.8063571273955387, -0.7481899378489497, 'insta')])
```

In [ ]:
```

```