PLOTTING PIE CHART

```
import numpy as np
import matplotlib.pyplot as plt
```

```
slices = [30, 40, 20, 50]
plt.pie(slices)
plt.show()
```

```
#adding labels
labels = ['thirty','forty','twenty','fifty']
plt.pie(slices, labels=labels)
plt.show()
```

```
#setting edge color
plt.pie(slices, labels=labels, wedgeprops={'edgecolor':'black'})
plt.show()
```

```
#setting slice colors
color=['blue','red','yellow','green']
plt.pie(slices, labels=labels, colors=color, wedgeprops={'edgecolor':'black'})
plt.show()
```

```
#plotting real world data
labels=['js','html/css','SQL','Python','java']
slices=[59219, 55466, 47544,36443,35917]
plt.pie(slices, labels=labels, wedgeprops={'edgecolor':'black'})
plt.show()
```

```
#exploding the slice
explode=[0,0,0,0.1,0]
plt.pie(slices, labels=labels, explode=explode, wedgeprops={'edgecolor':'black'})
plt.show()
```

```
#adding shadow
plt.pie(slices, labels=labels,shadow=True, explode=explode, wedgeprops={'edgecolor':'black'})
plt.show()
```

```
#setting the starting angle
plt.pie(slices, labels=labels,shadow=True, startangle=90, explode=explode, wedgeprops={'edgecolor':'black'})
plt.show()
```

```
#displaying % of each slices
plt.pie(slices, labels=labels,shadow=True, startangle=90, autopct="%0.1f%%",explode=explode, wedgeprops={'edgecolor':'black'})
plt.show()
```

LINE PLOT

```
import random
```

```
#generate 10 random nos. btwn 25 to 35
ages=[random.randrange(25,35,1) for ages in range(11)]
ages=sorted(ages, reverse=False)
#generate 10 random nos. btwn 30k to 45k
devs = [random.randrange(30000,45000) for devs in range(11)]
devs=sorted(devs, reverse=False)
print(ages)
print(devs)
```

```
[26, 27, 28, 29, 30, 31, 31, 32, 32, 34, 34]
[31073, 32591, 33610, 37444, 37601, 39097, 39121, 40139, 40956, 43278, 43390]
```

```
#plotting line plot
plt.plot(ages, devs)
plt.show()
```

```
#adding title, xlabel & ylabel
plt.plot(ages, devs)
plt.title("Median salary in $ with age")
plt.xlabel("Age")
plt.ylabel("Median salary in $")
plt.show()
```

```
# adding more graphs to the same graph
py_devs = [random.randrange(50000,75000) for py_devs in range(11)]
py_devs=sorted(py_devs, reverse=False)
plt.plot(ages, devs)
plt.plot(ages, py_devs)
plt.title("Median salary in $ with age")
plt.xlabel("Age")
plt.ylabel("Median salary in $")
plt.show()
```

```
#adding legend to the plot

plt.plot(ages, devs, label="All developers")
plt.plot(ages, py_devs, label="Python developers")
plt.title("Median salary in $ with age")
plt.xlabel("Age")
plt.ylabel("Median salary in $")
plt.legend()
plt.show()
```

```
#setting color, markers,linestyle, line width
plt.style.use('seaborn-bright') #to change the style
plt.style.use('ggplot')
plt.plot(ages, devs,color="blue", linestyle="-", marker="D",linewidth=3, label="All developers")
plt.plot(ages, py_devs,color="red", linestyle="-.", marker="o", label="Python developers")
plt.title("Median salary in $ with age")
plt.xlabel("Age")
plt.ylabel("Median salary in $")
plt.grid(True) #adding grid to the plot
plt.legend()
plt.tight_layout() #add padding to the plot
plt.savefig("linePlot.png")        # saving the plot
plt.show()
```