

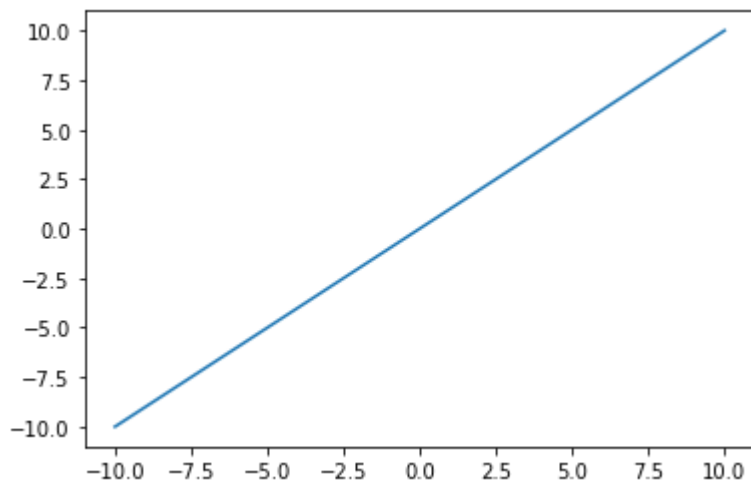
```
1 import matplotlib.pyplot as plt
```

```
1 x = []
2 for i in range(-10,11):
3     x.append(i)
4 x
```

```
[-10, -9, -8, -7, -6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
```

```
1 #linear y=f(x)=x
2
3 y=x
4 plt.plot(x,y)
```

```
☞ [ <matplotlib.lines.Line2D at 0x7f10931df610> ]
```



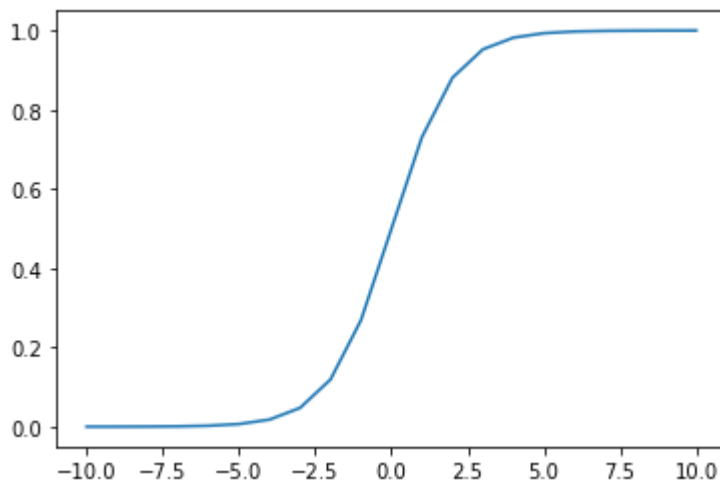
```
1 # bilinear y= {0 if x<0 , 1 if x>=0} ie theta is 0
2 y=[]
3 for i in x:
4     if i<0:
5         y.append(0)
6     else:
7         y.append(1)
8 plt.plot(x,y)
```

[<matplotlib.lines.Line2D at 0x7f1092c33ed0>]



```
1 #binary sigmoidal
2 import math
3 y=[]
4 for i in x:
5     v = 1/(1+math.exp(-i)) #sigma =1
6     y.append(v)
7 print(y)
8 plt.plot(x,y)
```

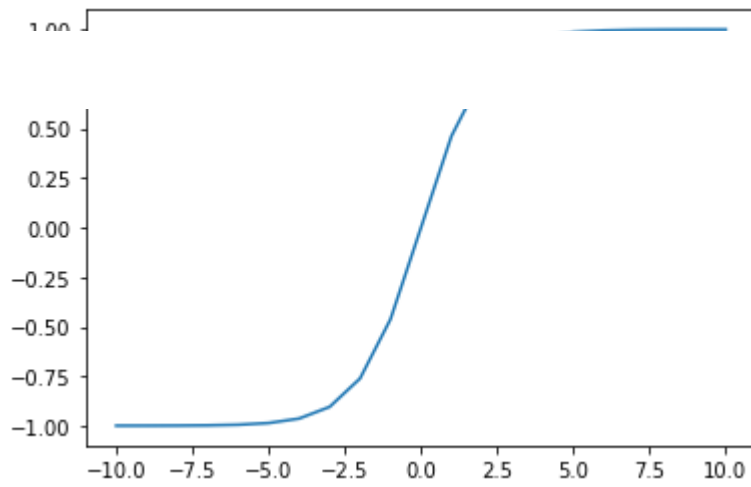
[4.5397868702434395e-05, 0.00012339457598623172, 0.0003353501304664781, 0.00091105119446  
[<matplotlib.lines.Line2D at 0x7f1092b77510>]



```
1 #bipolar sigmoid
2 y=[]
3 for i in x:
4     v=(1-math.exp(-i))/(1+math.exp(-i))
5     y.append(v)
6 plt.plot(x,y)
```

```
[<matplotlib.lines.Line2D at 0x7f1092ae4e10>]
```

1



✓ 0s completed at 4:46 PM

