```
In [39]: x=np.linspace(-10,10,100)

In [40]: from matplotlib import pyplot as plt

In [48]: #Linear plt.plot(x,x)

Out[48]: [<matplotlib.lines.Line2D at 0x1d08f0fc050>]

10.0 - 7.5 - 5.0 - 2.5 - 0.0 -
```

In [49]: #binary
plt.plot(np.heaviside(x,1))

5.0

7.5

10.0



-5.0

-2.5

0.0

2.5

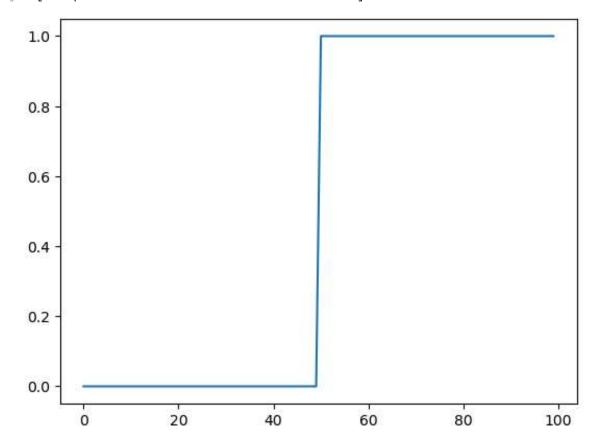
-10.0 -7.5

-2.5

-5.0 -

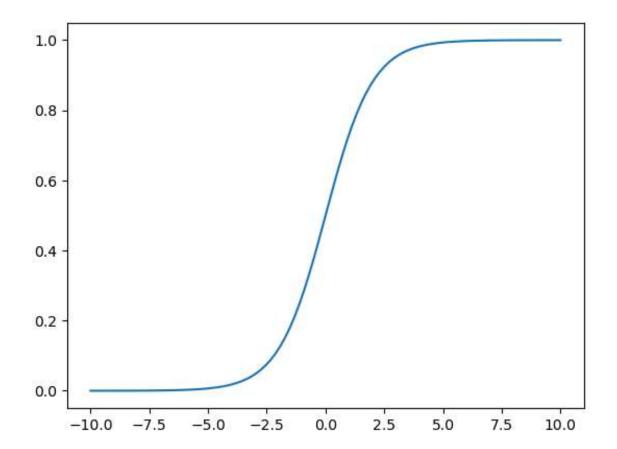
-7.5

-10.0



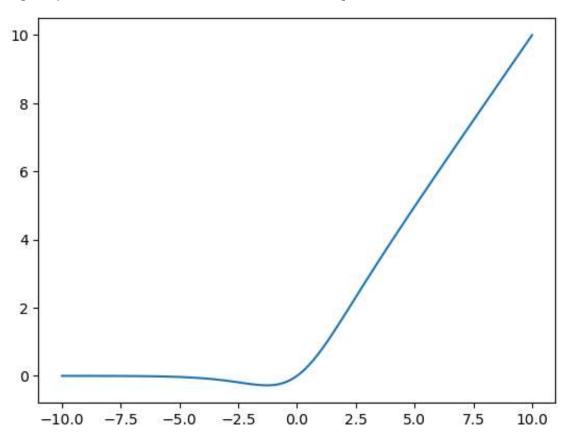
In [50]: #sigmoid
plt.plot(x,1/(1+np.exp(-x)))

Out[50]: [<matplotlib.lines.Line2D at 0x1d08f288e90>]



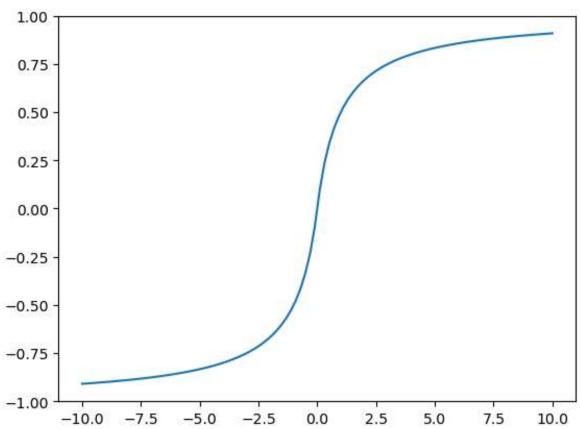
In [51]: #swish
 plt.plot(x,x/(1+np.exp(-x)))

Out[51]: [<matplotlib.lines.Line2D at 0x1d08f2c4d90>]



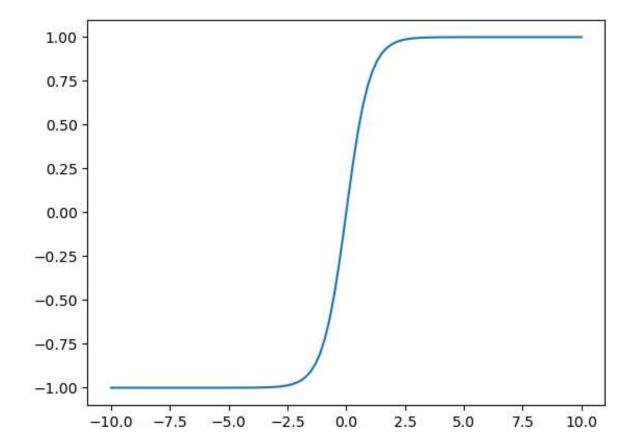
```
In [52]: #soft sign
plt.plot(x,x/(1+abs(x)))
```

Out[52]: [<matplotlib.lines.Line2D at 0x1d08f398090>]



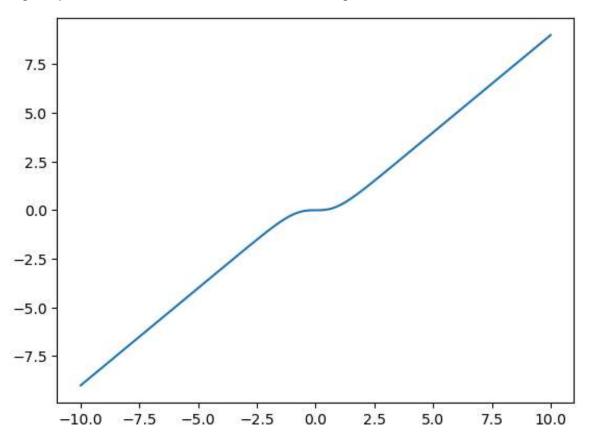
```
In [54]: #tanh
plt.plot(x,np.tanh(x))
```

Out[54]: [<matplotlib.lines.Line2D at 0x1d08f5362d0>]



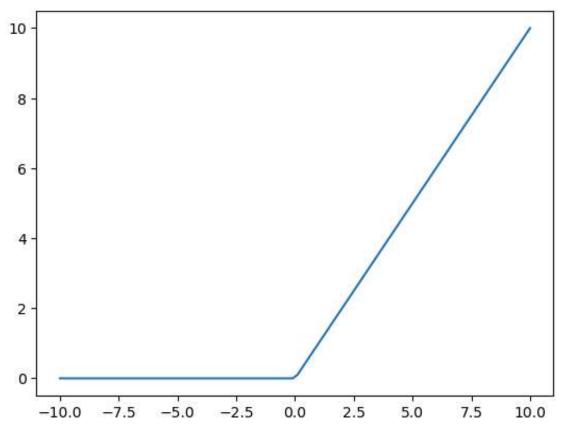
In [55]: #tanshirnk
plt.plot(x,x-np.tanh(x))

Out[55]: [<matplotlib.lines.Line2D at 0x1d0916c8090>]



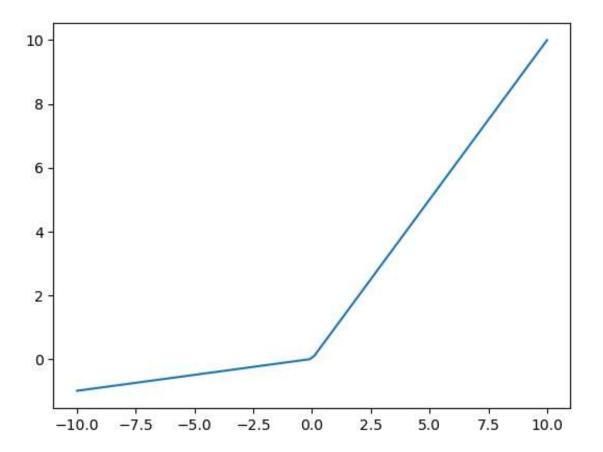
In [56]: #relu
plt.plot(x,np.maximum(0,x))

Out[56]: [<matplotlib.lines.Line2D at 0x1d0918a7d50>]



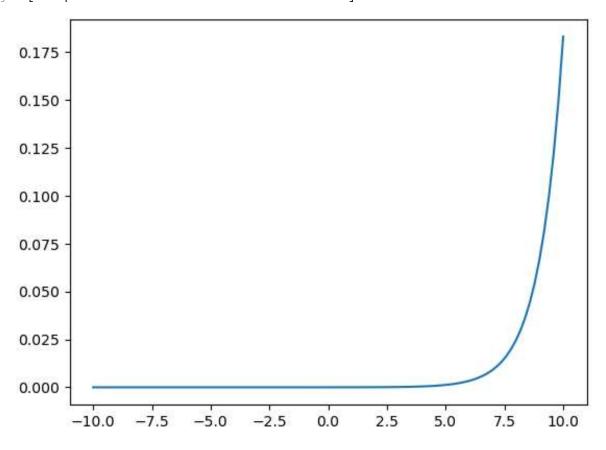
```
In [57]: #leaky relu
plt.plot(x,np.maximum(0.1*x,x))
```

Out[57]: [<matplotlib.lines.Line2D at 0x1d08f137010>]



In [53]: #soft max
plt.plot(x,np.exp(x)/np.sum(np.exp(x)))

Out[53]: [<matplotlib.lines.Line2D at 0x1d08f454d90>]



In []: