Untitled1

October 11, 2022

[ ]:
```
def cost_1(z):
    return - np.log(sigmoid(z))


def cost_0(z):
    return - np.log(1 - sigmoid(z))

z = np.arange(-10, 10, 0.1)
phi_z = sigmoid(z)

c1 = [cost_1(x) for x in z]
plt.plot(phi_z, c1, label='J(w) if y=1')

c0 = [cost_0(x) for x in z]
plt.plot(phi_z, c0, linestyle='--', label='J(w) if y=0')

plt.ylim(0.0, 5.1)
plt.xlim([0, 1])
plt.xlabel('$\phi$(z)')
plt.ylabel('J(w)')
plt.legend(loc='best')
plt.tight_layout()
#plt.savefig('images/03_04.png', dpi=300)
plt.show()
```