XOR/XNOR Perceptron Assignment Part 1

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Period 7

```
class percy:
	def __init__(self,w,t):
		self.weight = w
		self.thresh = t
	def set_input(self, i):
		self.input = i
	def __int__(self):
		count = 0
		for x in range(len(self.weight)):
			count += int(self.input[x]) * self.weight[x]
		if count > self.thresh:
			return 1
		return 0
n1 = percy([-1, 1], .5)
n2 = percy([1, -1], .5)
n3 = percy([1, 1], 0)
n3.set_input([n1, n2])
xor = n3
for a in range(2):
	for b in range(2):
		n1.set_input([a,b])
		n2.set_input([a,b])
		print(a, b, int(xor))
print("\n")
n1 = percy([1, 1], 1.5)
n2 = percy([-1, -1], -.5)
n3 = percy([1, 1], 0)
n3.set_input([n1, n2])
xnor = n3
for a in range(2):
	for b in range(2):
		n1.set_input([a,b])
		n2.set_input([a,b])
		print(a, b, int(xnor))
```

OUTPUT:

XOR:

(0, 0, 0)
(0, 1, 1)
(1, 0, 1)
(1, 1, 0)

XNOR:
(0, 0, 1)
(0, 1, 0)
(1, 0, 0)
(1, 1, 1)
[Finished in 0.0s]