```
class Neuron:
    def __init__(self, x_inputs, weights):
        self.x_inputs = x_inputs
        self.weights = weights
        self.weighted_ins = []
        self.total = None
        self.acti = None

    def adder(self):
        for i in range(0, len(self.x_inputs)):
            self.weighted_ins.append(self.x_inputs[i]*self.weights[i])
        self.total = sum(self.weighted_ins)
        return self.total

    def relu_act(self, acti=0):
        self.acti = acti
        if self.total > self.acti:
            return self.total
        else:
            return 0
```

```
import random
```

```
def gen_Random_Vals(list_len, low, high):
    rand_list = []
    for i in range(0, list_len):
        n = random.randint(low,high)
        rand_list.append(n)
    return rand_list
```

```
list_len = 5
r_xin = []
r_w = []

r_xin = gen_Random_Vals(list_len, -10, 10)
r_w = gen_Random_Vals(list_len, -1, 1)

myList = Neuron(r_xin,r_w)
```

```
myList.x_inputs
```

```
[6, -4, 4, -6, 6]
```

```
myList.weights
```

```
[-1, -1, 1, 0, 0]
```

```
myList.adder()
```

```
2
```

```
myList.weighted_ins
```

```
[-6, 4, 4, 0, 0]
```

```
myList.relu_act()
```

```
2
```

```

```

```
--NORMAL--
```