

Implement "Feed Forward"

Sample terminal input:

Your file	weight file	transfer	input data
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```
ff.py weights.txt T3 5 2 3 1 4
```

```
ff.py weight_3_2_2.txt T4 0.2 -1.4 3.2
```

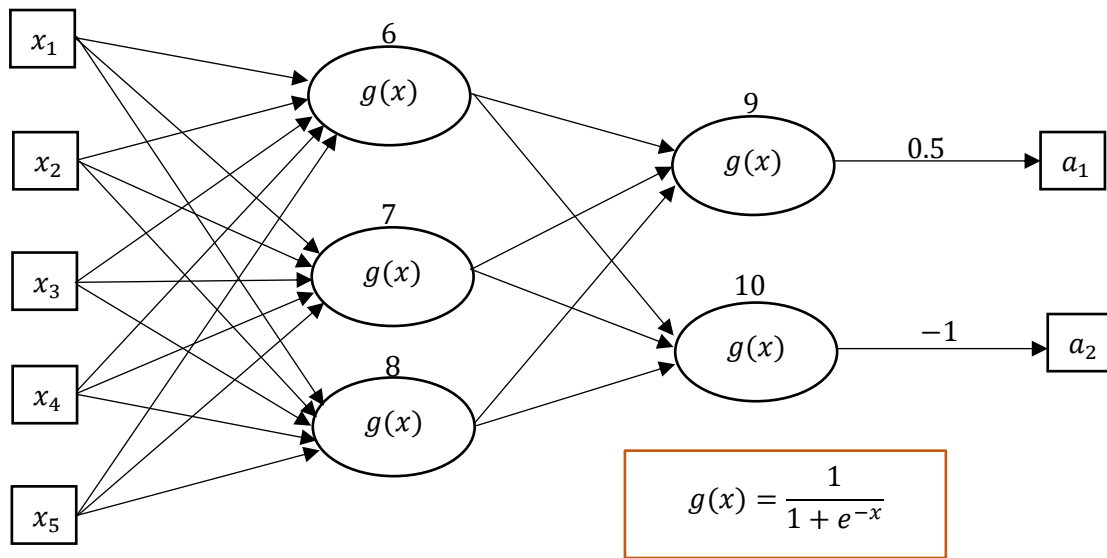
- Transfer(activation) function has some options (may be added later):
 - "T1" is a linear function: $g(x) = x$
 - "T2" is a ramp function: $g(x) = \begin{cases} x, & \text{if } x > 0 \\ 0, & \text{if } x \leq 0 \end{cases}$
 - "T3" is a logistic function: $g(x) = \frac{1}{1+e^{-x}}$
 - "T4" is a sigmoid function: $g(x) = -1 + \frac{2}{1+e^{-x}}$
- weights.txt
 - line 1: weights between inputs and first layer of cells
 - line 2: weights between first layer of cells and 2nd layer of cells
 - ...
 - line n-1: weights between penultimate layer of cells and final layer of cells
 - line n: weights between final layer of cells and the output

weights.txt for Example 4 (Example Set 1 worksheet or refer to the back page):

```
5 8 2 0 1 2 2 2 3 7 5 4 4 3 2
0 1 7 5 4 3
0.5 -1
```

Sample terminal output:

```
0.4998323249347668 -0.9999938558253978
```

Example 4)

$w_{1,6}$	$w_{2,6}$	$w_{3,6}$	$w_{4,6}$	$w_{5,6}$	$w_{1,7}$	$w_{2,7}$	$w_{3,7}$	$w_{4,7}$	$w_{5,7}$	$w_{1,8}$	$w_{2,8}$	$w_{3,8}$	$w_{4,8}$	$w_{5,8}$
5	8	2	0	1	2	2	2	3	7	5	4	4	3	2
$w_{6,9}$	$w_{7,9}$	$w_{8,9}$	$w_{6,10}$	$w_{7,10}$	$w_{8,10}$	Weights								
0	1	7	5	4	3									

x_1	x_2	x_3	x_4	x_5	Output	
					a_1	a_2
5	2	3	1	4		