temp1_new

September 30, 2020

Question 1a.

$$S = \begin{bmatrix} 10.9 & -12.7 \\ -12.7 & 26.7 \end{bmatrix}$$

$$r_t = \textbf{sigmoid}(W_{ir}x_t + b_{ir} + W_{hr}h_{t-1} + b_{hr})$$
$$z_t = \textbf{sigmoid}(W_{iz}x_t + b_{iz} + W_{hz}h_{t-1} + b_{hz})$$
$$n_t = \textbf{tanh}(W_{in}x_t + b_{in} + r_t * (W_{hn}h_{t-1} + b_{hn}))$$
$$h_t = (1 - z_t) * n_t + z_t + h_{t-1}$$

[1]:
```
mylist = [1,2,3,4]
print(mylist)
```

```
[1, 2, 3, 4]
```

This is a formula here:

$$x^2 + y^3 + 4 * zyx$$

[2]:
```
mylist.append(5)
mylist
```

[2]:
```
[1, 2, 3, 4, 5]
```

[3]:
```
print("hi my name is giraffe i like to pirouette during nutracker ballet")
```

```
hi my name is giraffe i like to pirouette during nutracker ballet
```

$$\sum_{n=0}^{\infty} \frac{x^n}{n!}$$