temp1_nodoubleMD

September 30, 2020

[1]:
```
# #### Question 1a.
#
# $$
# \mathbf{S} = \left[\begin{array}
# {rr}
# 10.9 & -12.7 \\
# -12.7 & 26.7
# \end{array}\right]
# $$
#
# $$
# \begin{array}{ll}
# r_t = \text{sigmoid}(W_{ir} x_t + b_{ir} + W_{hr} h_{t-1} + b_{hr}) \\
# z_t = \text{sigmoid}(W_{iz} x_t + b_{iz} + W_{hz} h_{t-1} + b_{hz}) \\
# n_t = \text{tanh}(W_{in} x_t + b_{in} + r_t * (W_{hn} h_{t-1} + b_{hn})) \\
# h_t = (1 - z_t) * n_t + z_t + h_{t-1} \\
# \end{array}
# $$
#
```

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

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

[3]:
```
# This is a formula here:
# $$
# x^2 + y^3 + 4*zyx
# $$
```

[4]:
```
mylist.append(5)
mylist
```

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

[5]:
```
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
```

[6]:
```
# $$
# \sum_{n = 0}^{\infty} \frac {x^n} {n!}
# $$
```