Assignment - 7A

Date	Time	load (KW)
01.09.2018	0:00	5551.322
02.09.2018	1:00	4583.172

Day-1(X)	Day-2(Ye)
5551.82208	4931.26380
4933.17134	4775.53968

1) $\eta = 0.01$, epochs = 2, m = 1, c = -1, $\vartheta = 0.9$, $V_m = 0$ & $V_e = 0$.

2) Iteration = 1, Sample i = 1

3)

4) $\frac{\partial E}{\partial m} = -(4931.26380 - 1(5551.82208) + 1)5552.82208)$

$= 34396.77 - 338750$

$\frac{\partial E}{\partial c} = 619.55828$

5) $V_m = -0.9(01 - (0.1)(3439677.338750) = -343967.733875$

$V_c = -61.95583$

6) $m = 1 + (-343967.733875) = -343966.733875$

$c = -62.95583$

7) Sample i = 1+1 = 2

8) $y = (-343966.734)(4983.17184) + (-62.95583)$

$= -1714045405.72$

9) $\frac{\partial E}{\partial m} = ((4775.53968 - (-343966.734)(4933.17184) - (-62.95583))(4983.17184)$

$= -8541406595609.112$

$\frac{\partial E}{\partial c} = -1714050181.261$

10) $V_m = -854140969131.67$

$V_c = -1714050073.88634$

11) $m = -8541413109 8.4$

$c = -62.95533$

12) Iteration = 2, Sample = 1

13) $y = -4.742040601415$

14) $\frac{\partial E}{\partial m} = -2.6326965715\text{E}19$

$\frac{\partial E}{\partial c} = -4.7420406015\text{E}15$

15) $V_m = 2.6326958\text{e}18$

$V_c = 4.74203906\text{E}14$

16) $m = -8541413098.4 + 2.6326958\text{E}18$

$= 2.6326949\text{5E}18$

$c = 4.74203906\text{e}14.$

17) Sample $i = 2$

18) $Y = 1.3119171\text{3E}22$

19) $\frac{\partial E}{\partial m} = -(4775.8398 - 1.3119171\text{8E}22)(4983.17184)$

$= -6537508\text{75E}25$

$\frac{\partial E}{\partial c} = -(4775.53968 - 1.3119171\text{8E}22)$

$= -1.3119171\text{8E}22$

20) $V_m = (0.9)(2.6326958\text{E}18) - (0.1)(-6.537508\text{75E}25)$

$= 6.537511\text{12E}24$

$V_c = 1.3117176\text{1E}21$

21) $m = 2.632.6949\text{5E}18 + 6.537111\text{2E}24$

$\boxed{m = 6.537513\text{75E}24}$

$c = 4.74203906\text{E}14 + 1.3119176\text{1E}21$

$\boxed{c = 1.3119180\text{8E}21}$