7(A)

Day1 (x)	Day2 (y)
5551.82208	4931.26380
4983.17184	4775.53968

Step-1 $\eta = 0.1$, epochs = 2, $m = 1$, $c = -1$,

$\vartheta = 0.9$, $V_m = 0$ & $V_c = 0$

Step-2: set Iteration = 1

Step-3: set sample = 1

Step-4:

$Y = (1)(5551.82208) - 1 = 5550.82208$

Step-5:

$\dfrac{\partial E}{\partial m} = -(4931.26380 - 1(5551.82208) + 1)$

5551.82208

$\dfrac{\partial E}{\partial m} = 3439677.338750$

$\dfrac{\partial E}{\partial c} = -(4931.26380 - 1(5551.82208) + 1)$

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

Step-6:

$V_m = 0.9(0) - (0.1)(3439677.338750)$

$V_m = -343967.7333375$

$V_c = 0.9(0) - (0.1)(619.55828)$

$V_c = -61.95583$

Step-7 $\quad \begin{cases} m = 1 + (-343969.933875) \\ \qquad = -343966.933875 \\ \\ c = -1 + (-61.95583) \\ \qquad = -62.95583 \end{cases}$

Step-8 sample
$\qquad i = i + 1 = 2$
repeat step-4

Step-4 $\quad Y = (-343966.734)(4983.19184) + (-62.95583)$

$\qquad Y = -1714045405.22$

Step-5 $\quad \dfrac{\partial E}{\partial m} = -\bigg((4975.53968 - (-343966.734) \\ \qquad\qquad\qquad (4983.19184) - \\ \qquad\qquad\qquad -(-62.95583)(4983.19184)$

$\qquad \dfrac{\partial E}{\partial m} = -8541406595607.112$

$\qquad \dfrac{\partial E}{\partial c} = -1714050181.261$

Step-6 $\quad V_m = 0.9(-343969.734) - (0.1)(-8541406595607.112)$

$\qquad V_m = -854140969691131.63$

$\qquad V_c = 0.9(-61.95583) - (0.1)(-1714050181.261)$

$\qquad V_c = -1714050073.88634$

step-7

$$m = 3+3966.734 - 854144096 9131.67$$

$$m = -854141313098.4$$

$$c = -62.95583$$

step-8

iteration+1 = 2
soumple = 1
repeat step-4

step-4

$$Y = (-854141313098.4)(5551.82208)+$$
$$(-62.95583)$$

$$Y = -4.7420406014E15$$

step-5

$$\frac{\partial E}{\partial m} = -(4931.26380 + 4.742040601 4E15)$$
$$(5551.82208)$$

$$= -2.6326965 7156E19$$

$$\frac{\partial E}{\partial c} = -4742040601 56E15$$

step-6

$$V_m = (0.9)(-854140969131.67) - (0.1)$$
$$(-2.6326965 7156E19)$$

$$= 2.6326958E18$$

$$V_c = (0.9)(-171405073.88634) - (0.1)(-4.742040$$
$$60150E15)$$

$$= 4.74203906E14$$

step-7

$$m = -854141313098.4 + 2.6326958E18$$
$$= 2.6326944 95E18$$

$$c = -62.95583 + 4.74203906E14$$
$$= 4.74203906E14$$

step-8   sample = 2
   repeated step-4
step-4

$$Y = 1.311911718 E22$$

step-5 $\dfrac{\partial E}{\partial m} = -6.53750375E25$

   $\dfrac{\partial E}{\partial c} = -1.311917018E22$

step-6 $V_m = (0.9)(2.632269158E18) - (0.1)$
                                        $(-6.53750875$
                                         $E25)$

   $= 6.53751112E24$

   $V_c = (0.9)(4.742039906E14) - (0.1)(-1.311917$
                                        $18E22)$

   $= 1.311917061E21$

step-7 $m = 2.632694915E + 6.53751112E24$

   $m = 6.537513725E24$

   $c = 4.742039064E14 + 1.311917061E21$

   $c = 1.311918 08E21$