(a)

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

step-1: Read dataset, $\eta = 0.1$, epochs = 2, $m = 1$, $c = -1$, $\gamma = 0.9$, $V_m = 0$ and $V_c = 0$

step-2: Set iter = 1

step-3: Set sample = 1

step-4: $Y = (1)(5551.82208) - 1)$

$= 5550.82208$

step-5: $\frac{\partial E}{\partial m} = -(4931.26380 - 1(5551.82208) + 1) 5551.82208$

$= 3439677.338750$

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

$= 619.55828$

step-6: $V_m = 0.9(0) - (0.1)(3439677.338750)$

$= -343967.733875$

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

$= -61.95583$

step-7: $m = 1 + (-343967.733875) = -343966.733875$

$c = -1 + (-61.95583) = -62.95583$

step-8: sample = i+1

$= 1+1 = 2$

step-9: $y = (343966.734)(4983.17184) + (-62.95583)$

$= -1714045405.72$

step-10: $\frac{\partial E}{\partial m} = -((4775.53968 - (-343966.734)(4983.17184) - (-62.95583))(4983.17184)$

$= -8541406595607.112$

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

Step-11: $V_m = 0.9(-343967.734) - (0.1)(-854140659607.112)$

$= -85414096913 1.67$

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

$= -1714050 73.88634$

Step-12: $m = -343966.734 - 854140969131.67$

$= -854141313098.4$

$c = -62.95583$

Step-13: $i = i+1$, sample $= 1$

$= 2$

Step-14: $y = (-854141313098.4)(5551.82208) + (-62.95583)$

$= -4.7420406014E15$

step-15: $\frac{\partial E}{\partial m} = -(4931.26380 + 4.7420406014E15)(5551.82208)$

$= -2.6326965715 6E19$

$\frac{\partial E}{\partial c} = -4742040601 50E15$

step-16: $V_m = (0.9)(-854140969131.67) - (0.1)(-2.6326965715 6E19)$

$= 2.6326958E18$

$V_c = 4.7420390 6E14$

step-17: $m = 2.6326949 5E18$

$c = 4.7420390 6E14$

step-18: sample $= i+1 = 2$

step-19 : $y = (2.63269495E18)(4983.17184) + 4.74203908E14$

$= 1.31191718E22$

step-20 : $\frac{\partial E}{\partial m} = -6.53750875E25$

$\frac{\partial E}{\partial c} = -1.31191718E22$

step-21 : $V_m = 6.53751112E24$, $V_c = 1.31917761E21$

step-22 : $m = 6.53751375E24$

$c = 1.31191808E21$ //