Assignment -2

Find global minimum point and value for function to,

181./4×1.0-0

f(a,y) = 2 +4y +10

Do monual calculation for 2 iterations

step 1 ; x=2 , y=3, n=0.01, epoches = 2

step 2 ! iter = 100000

 $\frac{1}{3x} = 2x = 32(2) = 4$

3+ = 24 = 2(3) = 6 (2009) (4) 1) 1 -18 p

step4 !- 0x=-9 24 =-0.01x4

DA = - 25 = -0.01xe = 305 0106

steps !- acatan

3 = 1.96

31.0 y = 4+Dy

= 3-0.06

y = 2.94

step 6 !- iter = iter+1 = 2

step 7 : 17 (ter sepoches)

goto reat step else goto steep z

step 3! $\frac{\partial f}{\partial x} = 2 (1.96) = 3.92$ 16+ consider aroundle approset have & 8f = 2(2.94) = 5.88 23/0002 to 13/0000 using studiestic factions Descent optimize step4: Da = - n of and by lower one =-001x 5.88 = -0.01×3.92 =-0.8392 =-00588 = 2.94 - 0.0588 99/2 = 1.96-0.0392 y = 2.881 188.2 = 18 9012 = 1.92 (つりかの十次) まする これりま Step6 - Fter = 2+1=3 345 = - (A!- Wa! - C) 25 stept :- if (iter) epoches) 90 to step 8

90 to step 8

90 to step 3

90 to step 3 step & !- print m, e Nature m=1.92 C=288) ()-1801-16)-= 36