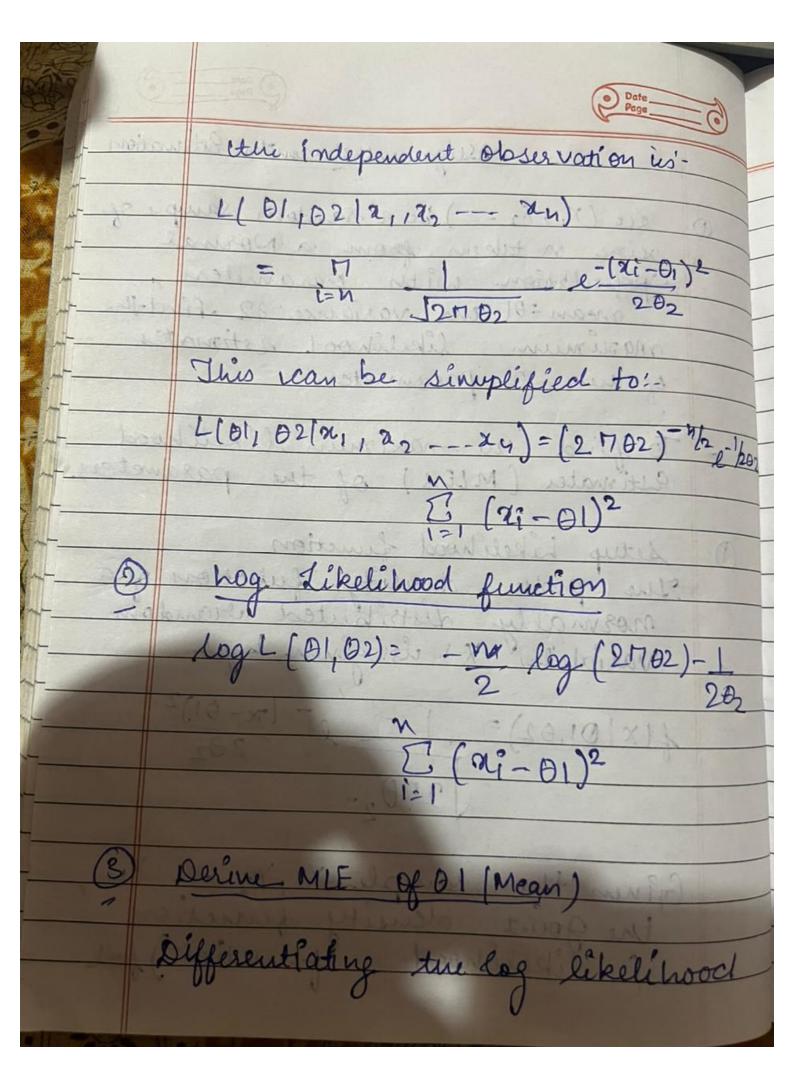
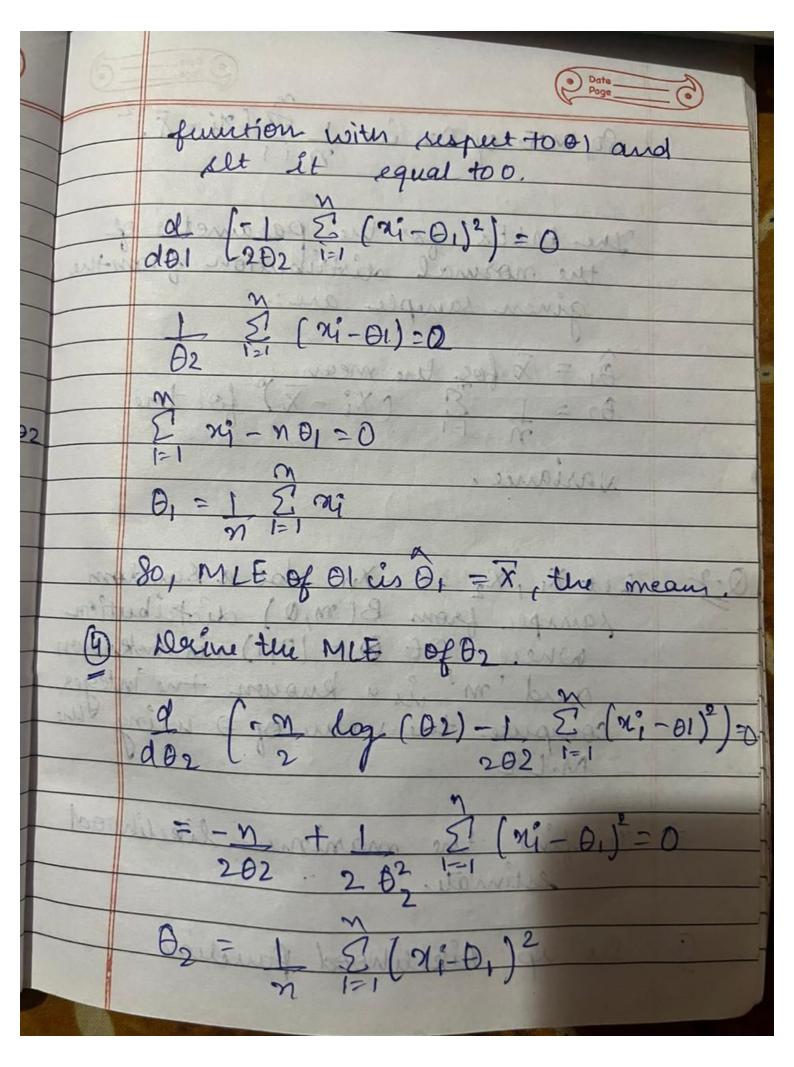
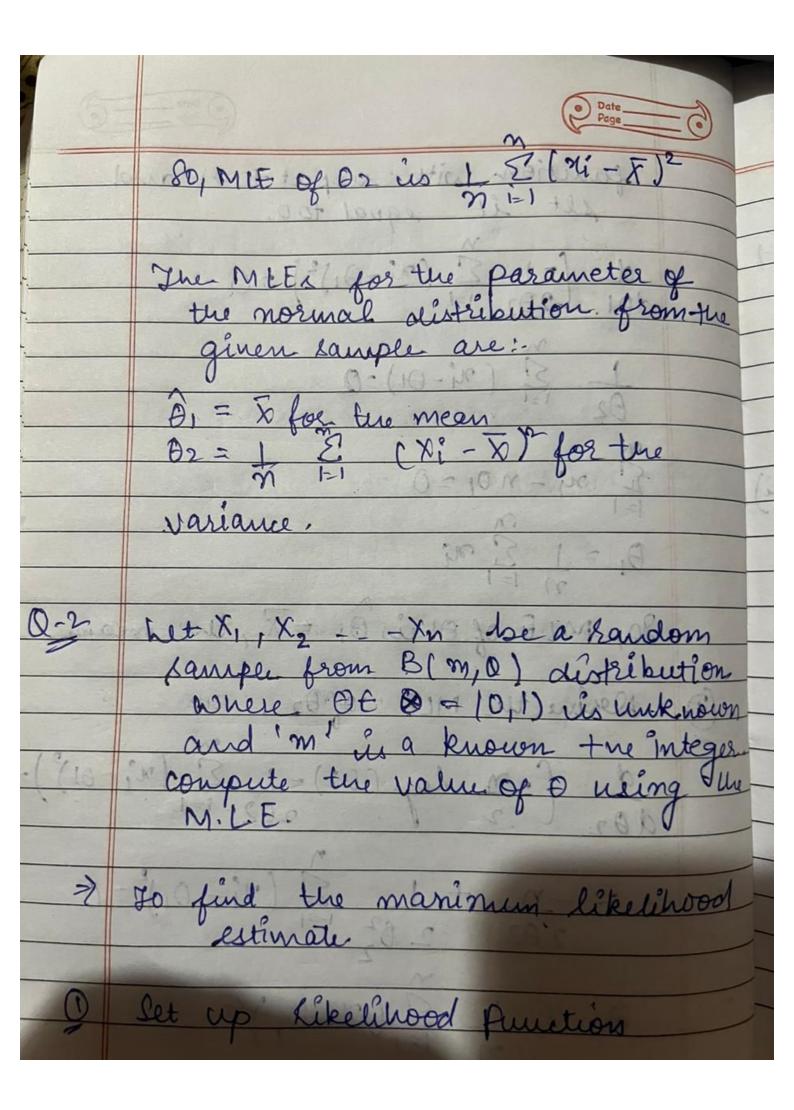
Assignment : Parameter Estimation Let (X, , X, ---) be a Random sample of size n taken from a Normal population with parameters mean=01 and variance=02 find-fre maximum likelihood retimates of these 2 parameters. To find the makimum likelihood Estimater (MIES) of the parameters. Destup Likelihood function
The probe density function of a
mormally distributed random
variable X is given by: $f(x|01,02) = \frac{1}{2\theta_2}$ 2110, Given the sample X1, X2 --- Xn, the goint density function [likelihood function) for







Given that each xi follows a binomial distribution the prof for each xi is given by P[ni = sû]= (m.) oni (1-0)m-ni Pos a grandom jample N1, N2-In form B(m,0), the Joint pmy of Obsoning this particular sample is: - L[D 1x1, x, - xn)= mm 8 24 (1-0)m-24 Given that [m) doesn't dépende on à it can be treated as constant with respect to D L(0/21, 22 -- 24)= / 1 / 200) 05. [(m-ni)

