	Assignment: Parameter Estimation.
1)	X, , X2 ··· · Xn - sample of size n
	mean = Os
	variana = Og.
	$= (x - 0.)^2$
/	f(x; 101.02) = (1/Jaxoz) e-(x-01)2
	$L(0_1,0_2 x_1x_n) = \Pi(1/\sqrt{2\pi0_2}) e^{-(x_1-0_1)^2}$
	202
	Taking bag
	$ln(L(0_1,0_2 x_1x_n)) = -nln(\sqrt{2\pi0_1^2}))-$
2	Σ ((χi-0,1)β/(202))
	Taking Partial derivatives.
-	the second control of the second seco
	∂ ln(L) /∂ 0, = (1/0,)* Z(ni -0,)
	Equating to zero
	$\Sigma (n_i - \omega_2) = 0$
	O, = (En; )/n -> MLE of Mean
	of rean
	8 (n(L)) 202 = -n/2 (1/02) + (1/2022)) E(ni-01)2
	12 (1/02)+(1/202)) 2(1/201)
	$o_2^2 = Z(n_i - o_1)^2/(n-1)$
	2 = 2(n( 3/1-/(Y1-1)
	Min (n) I = 1
	$Mean (O_1) = (\Xi x_1)/n$
	Variance (022) = Z (ni -01)2/(n-1)

	Na.
2.)	Y N
	x 2, x2, xn
	B(m, 0) distribution
	OE 0 = (0,1)
	the state of the s
	f(n; 10) = ori (1-0)(1-ni)
	fine (v)
	(1) (ni 10)
1	L(0/n2 nn) = TT f(ni 10)
	L(0 n,xn) = TT (0 ni (1-0) (1-ni))
	$L(\theta \mid n_1, \dots, n_n) = T(\theta \mid n_n)$
	ln [2(0  n, nn ]) = Z (n; ln(0) + (1-n; )ln(1-0)
	ln [ L(0   n, nn ) = Z (n; ln(0) + (1-1)
	d en(1)/d0 = \(\frac{1}{2}\)\(\left(\frac{1}{2}\)\(\text{o}) = \(\frac{1}{2}\)\(\left(\frac{1}{2}\)\(\text{o})\)\(\frac{1}{2}\)
	a lace for a second
	I(ni) = OE (1) = OZ (1/0) -Z (1/1-0))
	Z(ni) = 0Z(2) - 0Z(10)
	And Andrews An
	Z (ni) -no = n-0
	0 = Z(xe)/n
	waste to a P to the late that
	MLE of $0 = (Eni)/n$
1 - 1	