	HARSHIT GOYALAbhimanyus
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	Parameter Estimation disamment
QI	Parameter Estimation Assignment normal distribution
91	Ougan mean = O
	given mean = O1 variance = O2
	$PDF = f(x) = \frac{-(\pi - \mu)^2}{\sqrt{2\pi\sigma^2}}$
	101 - 1 (K)
	$l = \pi l l e^{-(n_i - \mu)}$
	$\mathcal{L} = \prod_{i=1}^{l} \frac{1}{\sqrt{2\pi^2}} e^{-\left(\frac{n_i - \mu}{2\sigma^2}\right)^2}$
	$(n (n)^2)$
	1= (1) n e-12(E, (-1))
	$\mathcal{L} = \left(\frac{1}{2 \pi \sigma^2} \right)^n e^{-\frac{1}{2} \left(\sum_{i=1}^n \left(\frac{n_i - \mu}{\sigma} \right)^2 \right)}$
	Take en
	$ln(\mathcal{L}) = n. ln \left(\frac{1}{\sqrt{2\pi\sigma^2}}\right) + ln \left(e^{\frac{1}{2\sigma^2}(n_i - \mu)^2}\right)$
	(N2 No2)
	= $n \left(\ln 10 - \ln \left(\sqrt{2\pi\sigma^2} \right) - 1 \leq (n - \mu)^2 \right)$
	2-2
	$=-n\ln\left(\sqrt{2\pi\sigma^2}\right)-1 \leq (2\pi i - \mu)^2$
	202
	For u
) (x(L)=0 => -1 ≥ 2 (n;-u)(-1)
1000	DU 202
	$\frac{\int ln(L) = 0 \Rightarrow -1}{2\sigma^2} = \frac{1}{2} = \frac{2(n_i - \mu)(-1)}{2\sigma^2}$
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	M= E(n;) = \(\overline{\pi}\) = Sample mean.
	For or2
	2 ln(e)=0
	$= 2 - 2 \times 1 \times$
	$= > - n \times 1 \times 2\pi + 1 = (n_1 - M)^2 = 0$ $= 2 2\pi \sigma^2 2\sigma^4$
	h 12
	$\frac{-2}{i^{-1}} = \frac{\left(\chi_i - \mu\right)^2}{n}$
-	* * * * * * * * * * * * * * * * * * * *
<u>Q</u> 2	polf = mcx; O2i(1-0)m-n;
	1 = 71 mcx; Oni (1-0) m- ni
	ln(1) = E (ln (mni) + viln Q + (m-ni) ln(1-0))
	$ \sum_{i=1}^{n} \left(\frac{n_i - (m - n_i)}{p} \right) = 0 $
	(=1 (O 1-O)
	E-11 - N.M-En; =0
	0 1-0
	0 1-0
	D= Eni.
	n.m