Pall no - 102 117185 - Bath - 6256 VCS 654 Predictive Analytic using Statistic Assignment Parameter Estimation OI: $\int (x)^{2} = \frac{1}{2} = \frac{1}$	Name - Mannat Pautui 9 100 " Commission of the same
VCSCSY Predictive Analytic using Statistics Assignment Parameter Estimation (1) $\{(x)^{-1}\}_{0}^{-1} = (x^{-1})^{-1}$ X, Xe, X ₂ , X _m are sample of size m. U(Xi, X ₁ , X ₂ , -, X _m) 7 $\{(x_1), f(x_2), \dots, f(x_n)\}_{0}^{-1}$ $= (x_1 - x_1)^{-1}$ U(Xi, X ₁ , X ₂ , -, X _m) 7 $\{(x_1), f(x_2), \dots, f(x_n)\}_{0}^{-1}$ $= (x_1 - x_1)^{-1}$	Rall no - 102 117185
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Parameter Estimation (a) $f(x) = \frac{1}{2} + \frac$	UCS654 Predictive Analytics using Statistics Assignment
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(0-1) 2014 Parameter Estimation - 101
$X_1, X_2, X_3,$	$(\chi - \chi)^2$
$X_1, X_2, X_3,$	1010 8(m-=) altine of order in 1 101 3 = 1 101
$X_1, X_2, X_3,$	V27102
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	X1, X2, X3, Xm are sample of size m.
$\frac{1}{2\pi\sigma^{2}} = \frac{e^{-\frac{1}{2\pi\sigma^{2}}} e^{-\frac{1}{2\pi\sigma^{2}}} e^{-\frac{1}{2}\sigma^{2}} e^{-\frac{1}{2\pi\sigma^{2}}} e^{-\frac{1}{2\sigma\sigma^{2}}} e^{-\frac{1}{2\sigma\sigma^$	L(X1, X2, X5,, Xm) 7 ((X4)- //X2) (Xm)
taking In on both sides. $ln(L) = -m ln(2 + 1 \sigma^{2}) + \frac{2}{2} [ni - H)^{2}$ $2 ln(L) = 0 + \frac{2}{2} - \left(2(2i - H)\right) = 0$ $2 m \bar{x} - n\mu = 0$ $2 m \bar{x} - n\mu = 0$ $2 m \bar{x} - m + \frac{2}{2} - (xi - H)^{2} = 0$ $3 m = \frac{2}{2} \cdot (xi - H)^{2} = 0$ $3 m = \frac{2}{2} \cdot (xi - H)^{2} = 0$ $3 m = \frac{2}{2} \cdot (xi - H)^{2} = 0$ $3 m = \frac{2}{2} \cdot (xi - H)^{2} = 0$ $3 m = \frac{2}{2} \cdot (xi - H)^{2} = 0$ $3 m = \frac{2}{2} \cdot (xi - H)^{2} = 0$	(N-M)~ (N-M)~ (N-M)
taking In on both sides. $ln(L) = -m ln(2 + 1 \sigma^{2}) + \frac{2}{2} [ni - H)^{2}$ $2 ln(L) = 0 + \frac{2}{2} - \left(2(2i - H)\right) = 0$ $2 m \bar{x} - n\mu = 0$ $2 m \bar{x} - n\mu = 0$ $2 m \bar{x} - m + \frac{2}{2} - (xi - H)^{2} = 0$ $3 m = \frac{2}{2} \cdot (xi - H)^{2} = 0$ $3 m = \frac{2}{2} \cdot (xi - H)^{2} = 0$ $3 m = \frac{2}{2} \cdot (xi - H)^{2} = 0$ $3 m = \frac{2}{2} \cdot (xi - H)^{2} = 0$ $3 m = \frac{2}{2} \cdot (xi - H)^{2} = 0$ $3 m = \frac{2}{2} \cdot (xi - H)^{2} = 0$	e 200 c 300 c 300
$\ln(L) = -\frac{m}{m} \ln(2\pi i \sigma^{2}) + \frac{E}{2} \ln(\pi i - \mu)^{2}$ $\frac{d \ln(L)}{2} = 0 + \frac{E}{2} - \left(2(2\pi i - \mu)\right) = 0$ $\frac{E}{2} \ln(\pi i - \mu) = 0$ $\frac{E}{2} \ln(\pi$	
$\frac{d\ln(l)}{d\mu} = 0 + \frac{2}{2} \cdot \frac{2}{2} \cdot \frac{(\pi i - \mu)}{2\sigma^{2}} = 0$ $\frac{2}{2} \cdot \frac{(\pi i - \mu)}{m \cdot x - m\mu = 0}$ $\frac{2}{2} \cdot \frac{(\pi i - \mu)}{m \cdot x - m\mu = 0}$ $\frac{2}{2} \cdot \frac{(\pi i - \mu)}{2\sigma^{2}} = 0$	taking in on both sides.
$\frac{d\ln(l)}{d\mu} = 0 + \frac{2}{2} \cdot \frac{2}{2} \cdot \frac{(\pi i - \mu)}{2\sigma^{2}} = 0$ $\frac{2}{2} \cdot \frac{(\pi i - \mu)}{m \cdot x - m\mu = 0}$ $\frac{2}{2} \cdot \frac{(\pi i - \mu)}{m \cdot x - m\mu = 0}$ $\frac{2}{2} \cdot \frac{(\pi i - \mu)}{2\sigma^{2}} = 0$	ln(L)= -m ln(2110)+ & [ni-4)2 -D
$\frac{\partial \mu}{\partial x} = \frac{\partial \mu}{\partial x}$	2 7 20
$\frac{\mathcal{E}}{\mathcal{E}} \left(\frac{\pi i - \mathcal{H}}{m \bar{x}} - \frac{\pi \mu = 0}{m \bar{x} - m\mu = 0} \right)$ $\frac{\bar{x} = \mu}{\bar{x} + \mu}$ $\frac{d \ln(L)}{d - m} + \frac{\bar{x} - (xi - \mu)^2}{2\sigma^2} = 0$ $\frac{d - \mu}{d - \mu} = \frac{\pi i - \mu}{d - \mu} = 0$ $\frac{d - \mu}{d - \mu} = \frac{\pi i - \mu}{d - \mu}$ $\frac{d - \mu}{d - \mu} = 0$ $\frac{d - \mu}{d$	dh(L) = 0+ E - (2(Xi-H)) = 0
$ \frac{x - n\mu = 0}{x - \mu} $ $ \frac{x - \mu}{x - \mu} $	du 200
$ \frac{m x - m\mu = 0}{x = \mu} $ $ \frac{x = \mu}{x} $	$\mathcal{E}\left(n\dot{u}-\mathcal{H}\right)=0$
$ \frac{\partial_{1} = \overline{x}}{\lambda} \text{ is therefore cample gream.} $ $ \frac{\partial \ln(\lambda)}{\partial \sigma^{2}} = -m + \frac{\chi}{2} - (\chi \dot{\iota} - \mu)^{2} = 0 $ $ \frac{\partial \sigma^{2}}{\partial \sigma^{2}} = \frac{\chi}{2} \left(\chi \dot{\iota} - \mu \right) = 0 $ $ \frac{\partial \sigma^{2}}{\partial \sigma^{2}} = \frac{\chi}{2} \left(\chi \dot{\iota} - \mu \right)^{2} $ $ \frac{\partial \sigma^{2}}{\partial \sigma^{2}} = \frac{\chi}{2} \left(\chi \dot{\iota} - \mu \right)^{2} $ $ \frac{\partial \sigma^{2}}{\partial \sigma^{2}} = \frac{\chi}{2} \left(\chi \dot{\iota} - \mu \right)^{2} $ $ \frac{\partial \sigma^{2}}{\partial \sigma^{2}} = \frac{\chi}{2} \left(\chi \dot{\iota} - \mu \right)^{2} $ $ \frac{\partial \sigma^{2}}{\partial \sigma^{2}} = \frac{\chi}{2} \left(\chi \dot{\iota} - \mu \right)^{2} $ $ \frac{\partial \sigma^{2}}{\partial \sigma^{2}} = \frac{\chi}{2} \left(\chi \dot{\iota} - \mu \right)^{2} $	$m_{\chi} - n\mu = 0$
$m = \underbrace{\frac{\pi}{2}}_{ni} \underbrace{\frac{\pi i - \mu}{2 \sigma^2}}_{mi-\mu} = 0$ $\underbrace{\frac{\pi}{2}}_{mi-\mu} \underbrace{\frac{\pi}{2}}_{mi-\mu} \underbrace{\frac{\pi}{2}}_{mi-\mu} = 0$	$x = \mu$
$m = \underbrace{\frac{\pi}{2}}_{ni} \underbrace{\frac{\pi i - \mu}{2 \sigma^2}}_{mi-\mu} = 0$ $\int_{mi-\mu}^{2\pi} \underbrace{\frac{\pi i - \mu}{2 \sigma^2}}_{mi-\mu}$	d, = x de therefore sample gream.
$m = \underbrace{\frac{\pi}{2}}_{ni} \underbrace{\frac{\pi i - \mu}{2 \sigma^2}}_{mi-\mu} = 0$ $\int_{mi-\mu}^{2\pi} \underbrace{\frac{\pi i - \mu}{2 \sigma^2}}_{mi-\mu}$	dm(L) = -m + \(\frac{2}{\tau} - \left(\frac{1}{\tau} - \left(\frac{1}{\tau} - \left(\frac{1}{\tau})^2 = 0
$r^2 = \frac{1}{2} \left(\frac{2}{2\pi} - \mu \right)^2$	do2 202 19 202
m C-1	$m = \frac{1}{2} \left(\frac{ni - \mu}{n} \right) = 0$
m C-1	$\frac{(2)}{2}$
$ \frac{\partial}{\partial z} = \frac{1}{2} \left(x_i - \mu \right)^2 $	$e^{2} = \frac{1}{2} \left(\chi i - \mu \right)$
$\Theta_{2} = \sum_{i=1}^{\infty} \{ \chi_{i} - \mu_{i} \}$	m (1
m	$\Theta_{2} = \underbrace{1}_{\Sigma} \underbrace{\Sigma}_{\Sigma} \underbrace{\Sigma}_{\Sigma} - \underbrace{M}_{\Sigma}$
	mosi

Binomial Distribution "Cri (0 xi (1- 9) n-xi log L= . E log 1 m (ni) + log 0 . E ni + log (1-0) & (n-ni) d log(L) (N-1) Eni = =) 0=-Eni

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