ASSIGNMENT – 8

Consider a real data set with observations listed as

.70	.84	.58	.50	.55	.82	.59	.71	.72	.61	.62	.49	.54
.36	.36	.71	.35	.64	.85	.55	.59	.29	.75	.46	.46	.60
.60	.36	.52	.68	.80	.55	.84	.34	.34	.70	.49	.56	.71
.61	.57	.73	.75	.44	.44	.81	.80	.87	.29	.50		

Try to fit this data set using Burr XII distribution and Burr X distribution by applying the Chi-square test and the K-S test when it is known that c=5.0000 and k=8.2680.

Burr X: CDF: F (x; c, k) =
$$(1 - e^{-(cx)^2})^k$$
; x>0, c>0, k>0

Burr XII: CDF: F (x; c, k) =
$$1 - (1 + x^c)^{-k}$$
; x>0, c>0, k>0