

Ejercicio 6

Tenemos la prueba de hipotesis:

H_0 :proviene de la distribucion $\exp(2)$

vs

H_a :no provienen de esa distribucion

```
observados<-c(0.0023, 0.0150, 0.0298, 0.0337, 0.0729, 0.0943, 0.0950, 0.1080,
              0.1180, 0.1300, 0.1500, 0.1592, 0.1617, 0.2016,0.2083, 0.2316,
              0.2403, 0.2863, 0.3427, 0.3766, 0.4384, 0.4715, 0.4895, 0.5544,
              0.5575, 0.5910, 0.5960, 0.6224,0.6517, 0.6602, 0.7197, 0.7317,
              0.7687, 0.8212, 0.9439, 1.1242, 1.2681, 1.2885, 2.3626, 2.6055)
```

Usamos la prueba de bondad de ajuste ji-cuadrada

```
gofTest(observados, test = "chisq", distribution = "exp", param.list = list(rate = 2),
        cut.points=c(0,0.3,0.7,1.1,Inf) )
```

```
## Warning in chisqGofTest(x = c(0.0023, 0.015, 0.0298, 0.0337, 0.0729, 0.0943, : Expected counts < 5.
##                               be appropriate.
```

```
##
## Results of Goodness-of-Fit Test
## -----
##
## Test Method:                Chi-square GOF
##
## Hypothesized Distribution:   Exponential(rate = 2)
##
## Data:                       observados
##
## Sample Size:                40
##
## Test Statistic:             Chi-square = 0.1078527
##
## Test Statistic Parameter:   df = 3
##
## P-value:                    0.9908787
##
## Alternative Hypothesis:     True cdf does not equal the
##                               Exponential(rate = 2)
##                               Distribution.
```

No se rechaza H_0 , por lo cual no hay evidencia suficiente para rechazar que proviene de la distribución $\exp(2)$.