

```

L_1      #parameter of Interance Distribution (Exponential)
LG_5     #parameter of Servises Distribution (Exponential)
TT_10000
t_nA_nD_n_Tp_0
A_NULL
D_NULL
x_rexp(1,L)
if(x<=10){
  tA_x
  tD_0
  repeat{
    if((tA>0)&(tD==0)){
      t_tA
      nA_nA+1
      n_n+1
      A[nA]_t
      y_rexp(1,LG)

tD_t+y
      x_rexp(1,L)
      if (t+x<=TT) tA_t+x
      else tA_0
    }

    if((tA>0)&(tD>0)&(tA<=tD)){
      t_tA
      nA_nA+1
      n_n+1
      A[nA]_t
      x_rexp(1,L)
      if (t+x<=TT) tA_t+x
      else tA_0
    }

    if((tA>0)&(tD>0)&(tA>tD)){
      t_tD
      nD_nD+1
      n_n-1
      D[nD]_t
      if(n==0) tD_0
      else{
        y_rexp(1,LG)
        tD_t+y
      }
    }

    if((tA==0)&(tD>0)){
      t_tD
      nD_nD+1
      n_n-1
      D[nD]_t
      if(n==0) tD_0
      else{
        y_rexp(1,LG)
        tD_t+y
      }
    }

    if((tA==0)&(tD==0)){
      Tp_max(0,t-TT)
      break
    }
  }
}
hist(D-A,prob=T,nclass=100)
m_mean(D-A)
a_seq(0,6,.01)
lines(a,dexp(a,1/m))
Tp

```