```
function [conm,x,r,conma] = MH2(x0, m, d, sig2)
                                      sig1=
                                      step=100;
                                      x(1)=x0;
                                      %rej=0;
                                      for n=1:step
                                          %Generate y from N(m, sigma1)
                                          y=normrnd(m,sig1);
                                          rho=min(1,exp(((x(n)-d)^2-(y-d)^2)/(2*sig2^2)));
                                          r(n)=rho;
                                          if rand()>rho
                                              x(n+1)=x(n);
                                              %rej=rej+1;
                                          else
                                              x(n+1)=y;
                                          end
                                      end
                                      conma=cumsum(x)./(1:step+1);
```

conm=conma(step+1);