```r
library(caTools)          # external package providing write
    .gif function
jet.colors <- colorRampPalette(c("#00007F", "blue", "#007
    FFF", "cyan", "#7FFF7F", "yellow", "#FF7F00", "red", "#7
    F0000"))
m <- 1200                 # define size
C <- complex( real=rep(seq(-1.8,0.6, length.out=m), each=m)
    , imag=rep(seq(-1.2,1.2, length.out=m), m))
C <- matrix(C,m,m)        # reshape as square matrix of
    complex numbers
Z <- 0                    # initialize Z to zero
X <- array(0, c(m,m,20))  # initialize output 3D array
for (k in 1:20) {         # loop with 20 iterations
  Z <- Z^2+C              # the central difference equation
  X[,,k] <- exp(-abs(Z))  # capture results
}
write.gif(X, "Mandelbrot.gif", col=jet.colors, delay=100)
```

Listing 1: Рисуем фрактал Мандельброта на R