library(Matrix)

makeCacheMatrix <- function(x = matrix()) {

if (ncol(x)==nrow(x) && det(x)!=0) {

m<-NULL

set<-function(y){

x<<-y

m<<-NULL

}

get<-function() x

#setinverse <- function() m <<- inv(x)

setinverse <- function() m <<- inv(data, ...)

getinverse<-function() m <<- inv(data,...)

list(set=set,get=get,setinverse=setinverse,getinverse=getinverse)

}else{

return(message("The matrix is'n invertible."))

}

}

cacheSolve <- function(x, ...) {

#m<-x$getinverse

m<-x$getinverse()

if (!is.null(m)) {

message("getting cached data")

return(m)

}

#data<-x$get

data<-x=get()

m <- inv(data, ...)

x$setinverse(m)

m

}

x <-makeCacheMatrix(matrix(c(1,0,0,0,1,0,0,0,2),ncol=3,nrow=3))

cacheSolve(x)

x$get()

x$getinverse()