

```
## Function to create a special "matrix" object that can cache its inverse
```

```
makeCacheMatrix <- function(x = matrix()) {  
  inv <- NULL  
  set <- function(y) {  
    x <- y  
    inv <- NULL  
  }  
  get <- function() x  
  setInverse <- function(inverse) inv <- inverse  
  getInverse <- function() inv  
  list(set = set, get = get, setInverse = setInverse, getInverse = getInverse)  
}
```

```
## Function to compute the inverse of the special "matrix" returned by makeCacheMatrix
```

```
cacheSolve <- function(x, ...) {  
  inv <- x$getInverse()  
  if (!is.null(inv)) {  
    message("getting cached data")  
    return(inv)  
  }  
  data <- x$get()  
  inv <- solve(data, ...)  
  x$setInverse(inv)  
  inv  
}
```