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— title: "Homework 6" author: "Maia Austin" date: "3/10/2021" output:
html_document -- 1. "n_dims <- runif(1, min = 3, max = 7) print(n_dims)
my_vec <- -1 : n_dims^2 newvec <- -sample(my_vec) m <- -matrix(data =
newvec, ncol = n_dims, nrow = n_dims) print(m)
t(m) print(m)
firstandlast j- c(m[1,], m[nrow(m),]) sum(firstandlast) mean(firstandlast, trim=0)
e_m <- -eigen(m) typeof(e_m$values) typeof(e_m$vectors)
""

```

The "eigen()" function results in

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2. "" my_matrix <- -matrix(runif(16), nrow = 4, ncol = 4)
my_logical <- -c(runif(100)) my_logical <- -my_logical > 0.5
my_letters <- -sample(letters)
my_list <- -list(mat = my_matrix, log = my_logical, let = my_letters)
list2 j- list(my_list$mat[2,2], my_list$log[2], my_list$let[2])
typeof(list2[[1]]) typeof(list2[[2]]) typeof(list2[[3]])
subset j- c(list2[[1]], list2[[2]], list2[[3]]) "" Making the list elements into a
vectors makes them into character strings.

```

3.