

# What to do next?

## Example

2. To run R, just type R

R

It's not quite as nice as RStudio, but works just as well.

```
R version 3.3.3 (2017-03-06) -- "Another Canoe"
Copyright (C) 2017 The R Foundation for Statistical Computing
Platform: x86_64-pc-linux-gnu (64-bit)

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  Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
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Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.
```

You can install packages just like normal, using `install.packages()`. Everything will be installed to your directory only.

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## Example

Maybe most usefully, you can also run an R script noninteractively.

Here's an example that I wrote on my laptop.

```
library(plyr)
library(dplyr)
library(tidyr)
library(ggplot2)

print("This is an example of an R Script")
setwd("~/")
mdf <- read.csv("example_metadata.csv", header=TRUE, row.names=1)
mdf.summary <- mdf %>% group_by(Species, Age, Sex, Reprod) %>% tally()
mdf.summary <- data.frame(mdf.summary)
print("I'm running a summary")
write.csv(mdf.summary, "mdfsummary.csv")

print("I'm printing a graphic")
theme_set(theme_classic(base_size=12, base_family="serif"))
ggplot(mdf.summary, aes(x=Species, y=n, fill=Sex)) + geom_bar(stat="identity") + scale_fill_manual(values=c("black", "gray"))

ggsave("mdftallies.png", width=5, height=5, units="in", dpi=300)

print("Script completed succesfully!")
```

If you want to follow along in this section, download the R script and metadata here: <https://github.com/mgaley-004/MiSeq-Analysis/tree/main/Help>

Before running it, I need to make sure I have installed any libraries I use on MSI and then upload the script. I also need to upload “example\_metadata.csv” since my script reads it in.