# First Assignment

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## Solution

### Tasks 1 and 2

I begin by creating a couple of lists, as instructed. Here is a bulleted list with a sub-list:

- First item.
- An item with a sub-list:
    - Item a.
    - Item b.
- Last item.

I have just finished task 1. Next, I will create a numbered list.

1. Grocery shopping
2. Email mom
3. Get lunch
4. Go on walk

The second task is now complete.

### Tasks 3 and 4

For the third task, I have to include some *italicized words*. And, for task 4, I need to add some **words in bold print**. This should convince you that I know how to **bold** and *italicize* text.

### Task 5

I've already used different headers. But, in case you still need to be convinced that I know how to create them, I'll include a few more:

### Header

### Another header

I believe this is enough.

### Task 6

I will write some code that adds two numbers. You should be able to see the corresponding output. But my code will be hidden.

```
## [1] "10 + 20 = 30"
```

**Task 7**

As instructed, next I will create a table. Specifically, I will generate a table that contains important Unix commands.

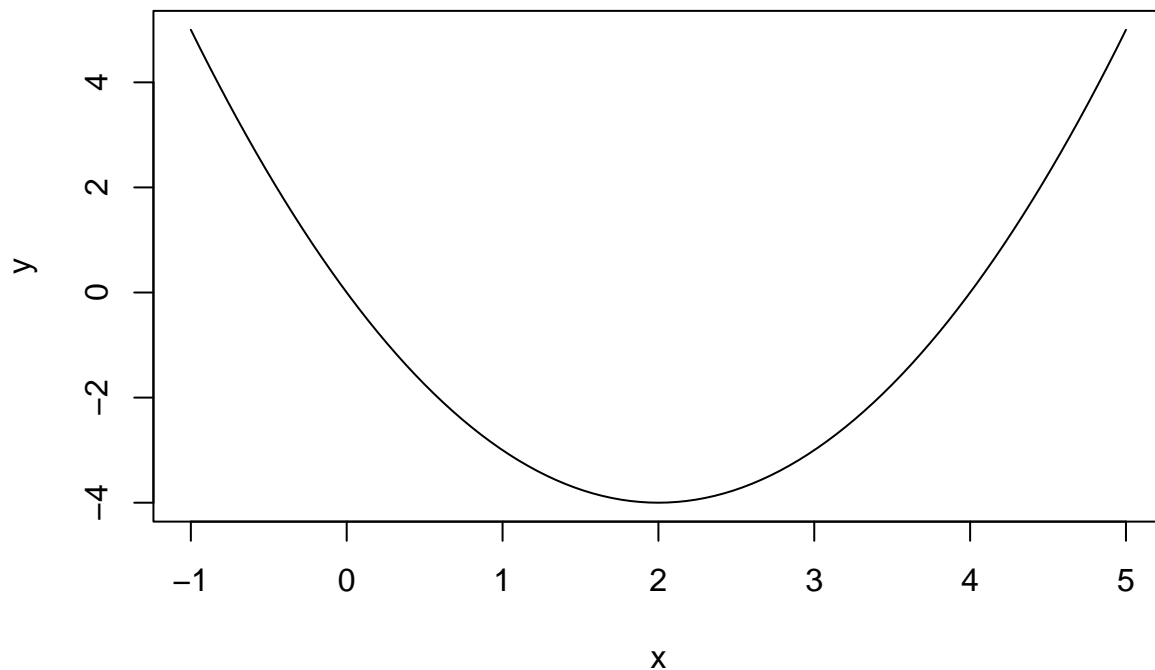| Name | Category | Description |
|------|----------|-------------|
| cd | Filesystem | Change the working directory |
| kill | Process management | Terminate or signal processes |
| sed | Text processing | Stream editor |

**Task 8**

For task 8, I will plot the following quadratic function:

$$y = f(x) = x^2 - 4x$$

To generate this plot, I will use the `curve` function.

```
curve(
  x^2 - 4 * x,
  from = -1,
  to = 5,
  xlab = "x",
  ylab = "y"
)
```



**Task 9**

The next step is to print my session info. The command for doing so is below. The output of this command is a little different from what you would expect. The reason is that I ran this code on my personal computer.

```
sessionInfo()
```

```
## R version 4.2.1 (2022-06-23)
## Platform: x86_64-pc-linux-gnu (64-bit)
## Running under: Arch Linux
##
## Matrix products: default
## BLAS:   /usr/lib/libblas.so.3.10.1
## LAPACK: /usr/lib/liblapack.so.3.10.1
##
## locale:
##  [1] LC_CTYPE=pt_BR.UTF-8       LC_NUMERIC=C
##  [3] LC_TIME=pt_BR.UTF-8        LC_COLLATE=pt_BR.UTF-8
##  [5] LC_MONETARY=pt_BR.UTF-8    LC_MESSAGES=pt_BR.UTF-8
##  [7] LC_PAPER=pt_BR.UTF-8       LC_NAME=C
##  [9] LC_ADDRESS=C               LC_TELEPHONE=C
## [11] LC_MEASUREMENT=pt_BR.UTF-8 LC_IDENTIFICATION=C
##
## attached base packages:
## [1] stats     graphics  grDevices utils     datasets  methods   base
##
## other attached packages:
## [1] rmarkdown_2.15  nvimcom_0.9-132
##
## loaded via a namespace (and not attached):
##  [1] knitr_1.39        magrittr_2.0.3    R.cache_0.16.0    rlang_1.0.4
##  [5] fastmap_1.1.0     fansi_1.0.3       highr_0.9         stringr_1.4.0
##  [9] styler_1.7.0      tools_4.2.1       xfun_0.32         R.oo_1.25.0
## [13] tinytex_0.41      utf8_1.2.2        cli_3.3.0         htmltools_0.5.3
## [17] yaml_2.3.5        digest_0.6.29     tibble_3.1.8      lifecycle_1.0.1
## [21] purrr_0.3.4       vctrs_0.4.1       R.utils_2.12.0    glue_1.6.2
## [25] evaluate_0.16     stringi_1.7.8     compiler_4.2.1    pillar_1.8.0
## [29] R.methodsS3_1.8.2 pkgconfig_2.0.3
```

**Tasks 10 and 11**

Recall that the last two tasks are the following:

- Execute .Rmd file.
- Upload knitted PDF.

Obviously, these are problems that I cannot solve **here**. However, if you are reading this document, this is a
pretty good indication that I succeeded.