Day 2: Password Philosophy

https://adventofcode.com/2020/day/2

```
input = read_delim("inputs/02-input.txt", delim = "\n", col_names = "text")
```

Part 1

- split up the input
- get count of letter in password
- filter by count being within specified range

```
df = input %>%
  # split up input
  separate(text, sep = ": ", into = c("directions", "password")) %>%
  separate(directions, sep = " ", into = c("range", "letter")) %>%
  separate(range, sep = "-", into = c("range_lo", "range_hi"), convert = TRUE)
```

```
part_1 = df %>%
  # add count
  mutate(count = str_count(password, letter)) %>%
  # filter if between range values
  rowwise() %>%
  filter(between(count, range_lo, range_hi))

nrow(part_1)
```

```
## [1] 607
```

Part 2

- get letters at index of string (R uses one-indexing so simple enough)
- check XOR for each index equaling the valid letter

```
# extract substrings and take XOR
part_2 = df %>%
  mutate(first = str_sub(password, range_lo, range_lo),
         second = str_sub(password, range_hi, range_hi),
         valid = xor(first == letter, second == letter))

part_2 %>%
  filter(valid) %>%
  nrow()
```

```
## [1] 321
```