DAY 11

REGULAR EXPRESSION

- Anchors – `^` and `$`
  - `^The` matches any string that starts with The
  - `end$` matches a string that ends with end
  - `^The end$` exact string match (starts and ends with The end)
  - `roar` matches any string that has the text roar in it
- Quantifiers - `*` `+` `?` and `{}`
  - `abc*` matches a string that has ab followed by zero or more c
  - `abc+` matches a string that has ab followed by one or more c
  - `abc?` matches a string that has ab followed by zero or one c
  - `abc{2}` matches a string that has ab followed by 2 c
  - `abc{2,}` matches a string that has ab followed by 2 or more c
  - `abc{2,5}` matches a string that has ab followed by 2 up to 5 c
- OR operator - `|` or `[]`
  - `a(b|c)` matches a string that has a followed by b or c
  - `a[bc]` same as previous

GREP

- **grep:** Unix utility that searches a pattern through either information piped to it or files.
- **egrep:** extended grep, same as `grep -E`
- **zgrep:** compressed files.

-i	ignore case during search
-r,-R	search recursively
-v	invert match i.e. match everything except *pattern*
-l	list files that match *pattern*
-L	list files that do not match *pattern*
-n	prefix each line of output with the line number within its input file.
-A num	print `num` lines of trailing context after matching lines.
-B num	print `num` lines of leading context before matching lines.

```
100 Thomas  Manager   Sales       $5,000
200 Jason   Developer Technology  $5,500
300 Raj     Sysadmin  Technology  $7,000
500 Randy   Manager   Sales       $6,000
```

grep OR

```
grep 'Man\|Sales' employee.txt
-> 100 Thomas  Manager   Sales       $5,000
   300 Raj     Sysadmin  Technology  $7,000
   500 Randy   Manager   Sales       $6,000
```

grep AND

```
grep –i 'sys.*Tech' employee.txt
-> 100300 Raj   Sysadmin  Technology  $7,000
```

$(grep -oE "\b([0-9]{1,3}\.){3}[0-9]{1,3}\b" $file_path)