

--> 01 <--

RULES:

- > 0. The youngest player chooses one of two formats for the game:
 - * Whoever has the **smallest** pipe chain to complete the task wins the round.
 - * Whoever has the **largest** pipe chain to complete the task wins the round.
- > 1. The youngest player picks a task from the tasks card. You can not pick the same task twice.
- > 2. Shuffle the cards.
- > 3. Put the cards face down on the table.
- > 4. Going clockwise each player picks the top card from the deck and tries to complete the task.
- > 5. The first player who completes the task gets a point.
- > 6. **IF** there are no more tasks, **GOTO** 8
- > 7. **GOTO** 1.
- > 8. GAME OVER. INSERT COIN. **GOTO** 8

UNIX PIPES

The pipe symbol is `|` and you can see it kind of looks like a vertical pipe.

Any unix command that reads from the input and prints to the output can be piped into any other command.

For example:

```
$ cat 03.txt | grep "rises" | wc -l
```

`cat 03.txt` prints the contents of `03.txt` to the standard output.

`grep "rises"` reads from the input and prints only lines containing `rises`.

`wc -l` reads from the input and counts the lines.

`cat`, `grep`, `uniq` and most commands can either read from standard input or a given filename.

So using the pipe symbol `|` we make a chain of inputs and outputs. In this example, we will print how many lines have the word `rises` in them.

Drunken Sailor

What will we do with a drunken sailor?
What will we do with a drunken sailor?
What will we do with a drunken sailor?
Early in the morning!

Way hay and up she rises
Way hay and up she rises
Way hay and up she rises
Early in the morning!

Shave his belly with a rusty razor
Shave his belly with a rusty razor
Shave his belly with a rusty razor
Early in the morning!

Way hay and up she rises
Way hay and up she rises
Way hay and up she rises
Early in the morning!

Put him in a long boat till his sober
Put him in a long boat till his sober
Put him in a long boat till his sober
Early in the morning!

Way hay and up she rises
Way hay and up she rises
Way hay and up she rises
Early in the morning!

TASKS

- * print the second line
- * print the second to last line
- * print the 7th line
- * print the most common line
- * print the least common line
- * count how many lines have "rises"
- * print the first line that has W in it
- * count the lines that have "in" in them
- * show two random lines
- * count the words on the last two lines
- * print the 7th and 8th line
- * count the lines with !
- * count the lines without !
- * make a command chain that does not print anything

--> 05 <--

| cat

\$ cat 03.txt

cat: concatenate and print files

cat: take the input and print it

cat 03.txt: print the contents of 03.txt

```
| grep "PATTERN"
```

```
| grep -i "PATTERN"
```

```
| grep -v "PATTERN"
```

grep: print lines containing the PATTERN
grep -i: case insensitive matching
grep -v: print lines NOT containing PTRN

| sort

| sort -n

| sort -R

sort: sort the input alphabetically
sort -n: sort the input numerically
sort -R: shuffle the input (random sort)

| uniq

| uniq -c

| uniq -d

uniq: remove the duplicate lines
uniq -c: count the duplicate items
uniq -d: print only the duplicate lines

| wc -w

| wc -l

| wc -c

wc -l: print the line count
wc -c: print the byte count
wc -w: print the word count

--> 10 <--

| head -NUMBER

head: show the first NUMBER of lines

--> 11 <--

| tail -**NUMBER**

tail: show the last **NUMBER** of lines

--> 05 <--

| cat

\$ cat 03.txt

cat: concatenate and print files

cat: take the input and print it

cat 03.txt: print the contents of 03.txt

```
| grep "PATTERN"
```

```
| grep -i "PATTERN"
```

```
| grep -v "PATTERN"
```

grep: print lines containing the PATTERN
grep -i: case insensitive matching
grep -v: print lines NOT containing PTRN

| sort

| sort -n

| sort -R

sort: sort the input alphabetically
sort -n: sort the input numerically
sort -R: shuffle the input (random sort)

| uniq

| uniq -c

| uniq -d

uniq: remove the duplicate lines
uniq -c: count the duplicate items
uniq -d: print only the duplicate lines

| wc -w

| wc -l

| wc -c

wc -l: print the line count
wc -c: print the byte count
wc -w: print the word count

--> 10 <--

| head -NUMBER

head: show the first NUMBER of lines

--> 11 <--

| tail -**NUMBER**

tail: show the last NUMBER of lines

--> 05 <--

| cat

\$ cat 03.txt

cat: concatenate and print files
cat: take the input and print it
cat 03.txt: print the contents of 03.txt

```
| grep "PATTERN"
```

```
| grep -i "PATTERN"
```

```
| grep -v "PATTERN"
```

grep: print lines containing the PATTERN
grep -i: case insensitive matching
grep -v: print lines NOT containing PTRN

| sort

| sort -n

| sort -R

sort: sort the input alphabetically
sort -n: sort the input numerically
sort -R: shuffle the input (random sort)

| uniq

| uniq -c

| uniq -d

uniq: remove the duplicate lines
uniq -c: count the duplicate items
uniq -d: print only the duplicate lines

| wc -w

| wc -l

| wc -c

wc -l: print the line count
wc -c: print the byte count
wc -w: print the word count

--> 10 <--

| head -NUMBER

head: show the first NUMBER of lines

--> 11 <--

| tail -**NUMBER**

tail: show the last **NUMBER** of lines

--> 05 <--

| cat

\$ cat 03.txt

cat: concatenate and print files
cat: take the input and print it
cat 03.txt: print the contents of 03.txt

```
| grep "PATTERN"
```

```
| grep -i "PATTERN"
```

```
| grep -v "PATTERN"
```

grep: print lines containing the PATTERN
grep -i: case insensitive matching
grep -v: print lines NOT containing PTRN

| sort

| sort -n

| sort -R

sort: sort the input alphabetically
sort -n: sort the input numerically
sort -R: shuffle the input (random sort)

| uniq

| uniq -c

| uniq -d

uniq: remove the duplicate lines
uniq -c: count the duplicate items
uniq -d: print only the duplicate lines

| wc -w

| wc -l

| wc -c

wc -l: print the line count
wc -c: print the byte count
wc -w: print the word count

--> 10 <--

| head -NUMBER

head: show the first NUMBER of lines

--> 11 <--

| tail -**NUMBER**

tail: show the last **NUMBER** of lines

--> 05 <--

| cat

\$ cat 03.txt

cat: concatenate and print files

cat: take the input and print it

cat 03.txt: print the contents of 03.txt

```
| grep "PATTERN"
```

```
| grep -i "PATTERN"
```

```
| grep -v "PATTERN"
```

grep: print lines containing the PATTERN
grep -i: case insensitive matching
grep -v: print lines NOT containing PTRN

| sort

| sort -n

| sort -R

sort: sort the input alphabetically
sort -n: sort the input numerically
sort -R: shuffle the input (random sort)

| uniq

| uniq -c

| uniq -d

uniq: remove the duplicate lines
uniq -c: count the duplicate items
uniq -d: print only the duplicate lines

| wc -w

| wc -l

| wc -c

wc -l: print the line count
wc -c: print the byte count
wc -w: print the word count

--> 10 <--

| head -NUMBER

head: show the first NUMBER of lines

--> 11 <--

| tail -**NUMBER**

tail: show the last **NUMBER** of lines

--> 05 <--

| cat

\$ cat 03.txt

cat: concatenate and print files
cat: take the input and print it
cat 03.txt: print the contents of 03.txt


```
| grep "PATTERN"
```

```
| grep -i "PATTERN"
```

```
| grep -v "PATTERN"
```

grep: print lines containing the PATTERN
grep -i: case insensitive matching
grep -v: print lines NOT containing PTRN

| sort

| sort -n

| sort -R

sort: sort the input alphabetically
sort -n: sort the input numerically
sort -R: shuffle the input (random sort)

| uniq

| uniq -c

| uniq -d

uniq: remove the duplicate lines
uniq -c: count the duplicate items
uniq -d: print only the duplicate lines

| wc -w

| wc -l

| wc -c

wc -l: print the line count
wc -c: print the byte count
wc -w: print the word count

--> 10 <--

| head -NUMBER

head: show the first NUMBER of lines

--> 11 <--

| tail -**NUMBER**

tail: show the last **NUMBER** of lines

--> 05 <--

| cat

\$ cat 03.txt

cat: concatenate and print files
cat: take the input and print it
cat 03.txt: print the contents of 03.txt

```
| grep "PATTERN"
```

```
| grep -i "PATTERN"
```

```
| grep -v "PATTERN"
```

grep: print lines containing the PATTERN
grep -i: case insensitive matching
grep -v: print lines NOT containing PTRN

| sort

| sort -n

| sort -R

sort: sort the input alphabetically
sort -n: sort the input numerically
sort -R: shuffle the input (random sort)

| uniq

| uniq -c

| uniq -d

uniq: remove the duplicate lines
uniq -c: count the duplicate items
uniq -d: print only the duplicate lines

| wc -w

| wc -l

| wc -c

wc -l: print the line count
wc -c: print the byte count
wc -w: print the word count

--> 10 <--

| head -NUMBER

head: show the first NUMBER of lines

--> 11 <--

| tail -**NUMBER**

tail: show the last **NUMBER** of lines

--> 05 <--

| cat

\$ cat 03.txt

cat: concatenate and print files
cat: take the input and print it
cat 03.txt: print the contents of 03.txt

```
| grep "PATTERN"
```

```
| grep -i "PATTERN"
```

```
| grep -v "PATTERN"
```

```
-----  
grep: print lines containing the PATTERN  
grep -i: case insensitive matching  
grep -v: print lines NOT containing PTRN  
-----
```