Week 2: locale

linux,locale

locale

- set of parameters that define a user’s personal preferences
  - language
  - country
  - other area-specific things

`locale` command

- prints information about the current locale environment to standard output

Environment Variables

- variables that can be accessed from any child process

Common ones

- **HOME**: path to user’s home directory
- **PATH**: list of directories to search in for command to execute
- change value:
  - `export VARIABLE=`

LC_* Environment Variables

- `locale` gets its date from the LC_* environment variables

Examples

- `LC_TIME`
  - date and time formats
- `LC_NUMERIC`
  - non-monetary numeric formats
- `LC_COLLATE`
  - order for comparing and sorting

Locale Settings Can Affect Program Behavior

- default sort order for the `sort` command depends:
  - **`LC_COLLATE=‘C’`**: sorting is in ASCII order
  - **`LC_COLLATE=‘en_US’`**: sorting is case-insensitive except when the two strings are otherwise equal

    and one has an uppercase letter earlier than the other

- other locales have other sort orders

The ‘C’ Locale

- used to be the default locale (may not be true on most machines today)
- an environment of “least surprise”
    - basic and straightforward
- behaves like Unix system **before** locales

```
## Set locale for one variable
$ export LC_COLLATE='C'
## Set all locale
$ export LC_ALL='C'
```

`sort`: sorts lines of text files

- sort order depends on locale
- C locale: ASCII sorting

Usage

```
sort [OPTION] … [FILE] …
```

`comm`: compare two sorted files line by line

- comparison depends on locale

Usage

```
comm [OPTION] … FILE1 FILE2
```

`tr`: translate or delete characters

- to replace, provide two sets, each character mapping to a translate
- to delete, use `-d` option and only provide one set of characters to delete

Usage

```
tr [OPTION] … SET1 [SET2]
```