Lecture 08

- 2D arrays defined with two indices
- higher dimensional arrays defined by adding more indices
- array data stored linearly (columns & rows)
- string: array of characters
  - can initialize individual elements in curly brackets (ex: 'n', 'e', 't', 'i', '0', '3';)
  - can initialize whole string enclosed in quotes (ex: "hello");
- array names are equivalent to pointers
- string utilities defined in #include <string.h>
- strings are null-terminated - implicit null character at the end to end the string
- strcmp compares two strings

```
int strcmp (char *s1 , char *s2 );
```

- argc: argument counter
- everything interpreted as character strings when passing to main
- atoi: arg to int
- atof: arg to double
- in library is the function int rand (void)
- rand generates random integer between zero and RANDMAX
- need srand to set seed, found in stdlib.h
- prior: probability distribution function
- flat prior: same probability