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CS241 #24 Errors. errno & EINTR. UDP, TCP
int fseek(FILE *stream, long offset, int whence); whence = SEEK_SET, SEEK_CUR, or SEEK_END
long ftell(FILE *stream);
size_t fread(void *ptr, size_t size, size_t nmemb, FILE *stream);
```

Determine the length of the file. Reserve the correct amount of heap memory and read in the last half of the file to this memory. Assume the file length is even and < LONG\_MAX. Remember that you need to return a C string

```
char* read_last_half(const char* filename) { // returns NULL if file could not be loaded
FILE* file = fopen(filename, "r");
if (!file) { printf("%s:%s", filename, strerror( errno )); return NULL; }
```

```
}
```

You get a SIGPIPE signal when a \_\_\_\_\_ attempts to \_\_\_\_ and there are no more \_\_\_\_\_

How does a reader discover that there are no more writers?

What is errno and when is it set?

What about multiple threads?

When is errno set to zero?

What are the gotchas of using errno?

How can you print out the string message associated with a particular error number?

What are the gotchas of using strerror?

What is EINTR? What does it mean for sem\_wait? read? write?

Why are these calls wrapped in a while loop?

What is IP4?

What is 127.0.0.1?

What is a port?

Can my programs listen on any port?

What is UDP? When is it used?

What is TCP? When is it used?