open memory card file

fopen != NULL

find beginning of JPEG

buffer 512 bytes

sequences of bytes with distinct header

stored side-by-side in blocks of 512 bytes

reading lines fread(data, size, number, inptr);

      - data: pointer to a struct that will contain the bytes you're reading

      - size: size of each element read

      - number: number of elements read

      - inptr: FILE * to read from

fread(buffer, 512, 1, raw_file)

beginning of each JPEG indicated with sequence

if (buffer[0] == 0xff && buffer[1] == 0xd8 && buffer[2] == 0xff && (buffer[3] & 0xf0 == 0xe0)

      open a new JPEG

      naming JPEG's in order they are found, starting at 000 (keep track with counter++)

s   printf(filename, "%03i.jpg", 2) -> 002.jpg

      FILE *img = fopen(filename, "w")

if jpeg alreadyfound: write 512 bytes until new JPEG

      - data: pointer to the struct that contains the bytes you're reading from

      - size

      - number

      - outptr: FILE * to write to

detect end of file:

fread(buffer, 1, 512, raw_file) != 1

open card file

repeat until end of card

       read 512 bytes into a buffer

       start of a new JPEG

              YES ->

              NO ->

       already found a JPEG

              NO ->

              YES ->

close any remaining files

```
┌──────────────┐
│ Open memory  │
│ card file    │
└──────┬───────┘
       │
       ▼
┌──────────────────┐
│ create buffer    │
│ with 512 bytes   │
│ space            │
└──────┬───────────┘
       │
       ▼
┌──────────────────┐  No    ┌─────────┐      Close
│ check size block │───────▶│ end of  │────▶ Remaini
│     is 512       │        │  File   │      files
└──────┬───────────┘        └─────────┘
       │ Yes
       ▼
┌──────────────────┐  No
│ Read 512 bytes,  │
│   is JPEG?       │
└──────┬───────────┘
       │ Yes
       ▼
┌──────────────────┐  No    ┌─────────────┐
│ Already found    │───────▶│ Write New   │
│   JPEG?          │        │   JPEG      │
└──────┬───────────┘        └─────────────┘
       │ YES
       ▼
┌──────────────────┐
│ Close previous   │◀──────────
│   JPEG           │
└──────────────────┘
```