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Pseudocode
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Loop through 4 files
 Make 4 lists for each record (one per file)
If N is in the index OR index not in index-list
 Append index to header
 Put in low quality output file
Revcomp function

If indexes are the same
 Append index to header
 Put in index file

Else
 Append index to header
 Put in swap file

Reportnum function

High level functions

Def revcomp(index):
 """Takes index, writes complementary strand to it, and then reverses it to get it in 5' - 3' direction.
 Returns the output reverse complement of index.
 Example input: ACTG
 Output: CAGT

Def reportnum(file, category):
 """Takes output file and counts the number of read-pairs included in that file's category.
 Categories include: "match", "swap", "unknown" if the category is swap, function will also return
 number of unique index combinations."
 Example input: FASTQ file with 5 properly matched indexes, "match"
 Output: "5 matched indexes in FASTQ file"
 Example input: FASTQ file with 3 swapped indexes (2 same, 1 unique), "swap"
 Output: "3 swapped indexes, 2 AAA CCC, 1 AAA TTT"