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## Solution for date.c:

Step1: date\_create creates a Date structure from `datestr`
`datestr' is expected to be of the form "dd/mm/yyyy"
returns pointer to Date structure if successful,
NULL if not (syntax error)

Step2: date\_duplicate creates a duplicate of `d' returns pointer to new Date structure if successful NULL if not (memory allocation failure)

Step3: date\_compare compares two dates, returning <0, 0, >0 if date1<date2, date1==date2, date1>date2, respectively

Final: date\_destroy returns any storage associated with 'd' to the system

## Solution for tldlist.c:

Step1: tldlist\_create generates a list structure for storing counts against top level domains (TLDs)

Step2: creates a TLDList that is constrained to the `begin' and `end' Date's returns a pointer to the list if successful, NULL if not

Step3: tldlist\_destroy destroys the list structure in `tld' all heap allocated storage associated with the list is returned to the heap

Step4: tldlist\_add adds the TLD contained in `hostname' to the tldlist if `d' falls in the begin and end dates associated with the list; returns 1 if the entry was counted, 0 if not

Step5: tldlist\_count returns the number of successful tldlist\_add() calls since the creation of the TLDList

Step6: tldlist\_iter\_create creates an iterator over the TLDList; returns a pointer to the iterator if successful, NULL if not

Step7: tldlist\_iter\_next returns the next element in the list; returns a pointer to the TLDNode if successful, NULL if no more elements to return

Step8: tldlist\_iter\_destroy destroys the iterator specified by `iter'

Step9: tldnode\_tldname returns the tld associated with the TLDNode

Final: tldnode\_count returns the number of times that a log entry for the corresponding tld was added to the list