

**NAME**

bin\_search, copyfile, replace\_line, insert\_line

**SYNOPSIS**

```
char *bin_search(char *key, FILE *fp);
void copyfile(FILE *fromfp, FILE *tofp);
char *replace_line(char *new_line, char *key, FILE *fp);
char *insert_line(char *new_line, char *key, FILE *fp);
```

**DESCRIPTION**

The WordNet library contains several general purpose functions for performing a binary search and modifying sorted files.

**bin\_search()** is the primary binary search algorithm to search for *key* as the first item on a line in the file pointed to by *fp*. The delimiter between the key and the rest of the fields on the line, if any, must be a space. A pointer to a static variable containing the entire line is returned. **NULL** is returned if a match is not found.

The remaining functions are not used by WordNet, and are only briefly described.

**copyfile()** copies the contents of one file to another.

**replace\_line()** replaces a line in a file having searchkey *key* with the contents of *new\_line*. It returns the original line or **NULL** in case of error.

**insert\_line()** finds the proper place to insert the contents of *new\_line*, having searchkey *key* in the sorted file pointed to by *fp*. It returns **NULL** if a line with this searchkey is already in the file.

**NOTES**

The maximum length of *key* is 1024.

The maximum line length in a file is 25K.

If there are no additional fields after the search key, the key must be followed by at least one space before the newline character.

**SEE ALSO**

**wnintro(3WN)**, **morph(3WN)**, **wnsearch(3WN)**, **wnutil(3WN)**, **wnintro(5WN)**.

**WARNINGS**

**binsearch()** returns a pointer to a static character buffer. The returned string should be copied by the caller if the results need to be saved, as a subsequent call will replace the contents of the static buffer.