## **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.