NAME

    yacc – an LALR(1) parser generator

SYNOPSIS

    yacc [**-dlrtv**] [**-b** *prefix*] [**-o** *output_file*] [**-p** *symbol_prefix*] *filename*

DESCRIPTION

    yacc reads the grammar specification in the file *filename* and generates an LR(1) parser for it. The parsers consist of a set of LALR(1) parsing tables and a driver routine written in the C programming language. **yacc** normally writes the parse tables and the driver routine to the file y.tab.c.

    The following options are available:

    -b *prefix*   The **-b** option changes the prefix prepended to the output file names to the string denoted by *prefix*. The default prefix is the character *y*.

    -d   The **-d** option causes the header file y.tab.h to be written.

    -l   If the **-l** option is not specified, **yacc** will insert #line directives in the generated code. The #line directives let the C compiler relate errors in the generated code to the user's original code. If the **-l** option is specified, **yacc** will not insert the #line directives. #line directives specified by the user will be retained.

    -o *output_file*   The **-o** option specifies an explicit name for the parser's output file name instead of the default. The names of the other output files are constructed from output_file as described under the **-d** and **-v** options.

    -p *symbol_prefix*   The **-p** option changes the prefix prepended to yacc-generated symbols to the string denoted by *symbol_prefix*. The default prefix is the string *yy*.

    -r   The **-r** option causes **yacc** to produce separate files for code and tables. The code file is named y.code.c, and the tables file is named y.tab.c.

    -t   The **-t** option changes the preprocessor directives generated by **yacc** so that debugging statements will be incorporated in the compiled code.

    -v   The **-v** option causes a human-readable description of the generated parser to be written to the file y.output.

ENVIRONMENT

    The following environment variable is referenced by **yacc**:

    TMPDIR   If the environment variable TMPDIR is set, the string denoted by TMPDIR will be used as the name of the directory where the temporary files are created.

TABLES

    The names of the tables generated by this version of **yacc** are "yylhs", "yylen", "yydefred", "yydgoto", "yysindex", "yyrindex", "yygindex", "yytable", and "yycheck". Two additional tables, "yyname" and "yyrule", are created if YYDEBUG is defined and non-zero.

FILES

```
y.code.c
y.tab.c
y.tab.h
y.output
/tmp/yacc.aXXXXXXXXXX
/tmp/yacc.tXXXXXXXXXX
/tmp/yacc.uXXXXXXXXXX
```

DIAGNOSTICS

If there are rules that are never reduced, the number of such rules is written to the standard error. If there are any LALR(1) conflicts, the number of conflicts is also written to the standard error.

SEE ALSO

`yyfix(1)`

STANDARDS

The **`yacc`** utility conforms to IEEE Std1003.2 (''POSIX.2'').

NAME

`yyfix` – extract tables from y.tab.c

SYNOPSIS

`yyfix` `file` [`tables`]

DESCRIPTION

Programs have historically used a script (often named '':yyfix'') to extract tables from the `yacc`(1) generated file `y.tab.c`. As the names of the tables generated by the current version of `yacc` are different from those of historical versions of `yacc`, the shell script **`yyfix`** is provided to simplify the transition.

The first (and required) argument to **`yyfix`** is the name of the file where the extracted tables should be stored.

If further command line arguments are specified, they are taken as the list of tables to be extracted. Otherwise, **`yyfix`** attempts to determine if the `y.tab.c` file is from an old or new `yacc`, and extracts the appropriate tables.

The tables ''yyexca'', ''yyact'', ''yypact'', ''yypgo'', ''yyr1'', ''yyr2'', ''yychk'', and ''yydef'' are extracted from historical versions of `yacc`.

The tables ''yylhs'', ''yylen'', ''yydefred'', ''yydgoto'', ''yysindex'', ''yyrindex'', ''yygindex'', ''yytable'', ''yyname'', ''yyrule'', and ''yycheck'', are extracted from the current version of `yacc`.

FILES

`y.tab.c` File from which tables are extracted.

SEE ALSO

`yacc(1)`

HISTORY

The **`yyfix`** command first appeared in 4.4BSD.