NAME

compiler488 − a compiler for the CSC 488S Project Language

SYNOPSIS

compiler488 **[** −**X**] [−**D**[*axy*]] [−**T**[*acipsxy*]][−**O** *outputFilename*]
[−**E** *errorFilename*] [−**R** *traceFilename*] [−**U** *dumpFilename*]
[−**I** *runInputFilename*] [*sourceFile*]

DESCRIPTION

compiler488 is an incredibly well designed and implemented compiler for the CSC488S Course Project Language.

The compiler compiles and then attempts to execute one program written in the CSC488S Project Language. The compiler reads the source program from *sourceFile* if it was specified in the command that invoked the compiler. Otherwise it expects the source program on standard input.

OPTIONS

The options currently implemented by the compiler488 are:

−**X** Suppress execution of the compiled program. Saves time when testing an incomplete code generator.

−**D** Specify dump options. The letters *axy* indicate which information should be dumped to the compilers *dumpFile*.
x − dump the abstract syntax tree
x − dump the compiled code just before execution
y − dump symbol table information

−**T** Specify trace options. The letters *acipsxy* indicate which trace information should be written to the compilers *traceFile*.
c − trace AST generation
c − trace code generation
i − trace source program input in the scanner
p − trace parsing
s − trace semantic analysis
x − trace program execution
y − trace symbol table operations

−**E** *errorFile*
Specify an alternative file to receive error messages generated by the compiler. Default for error messages is stderr.

−**O** *outputFileName*
Specify an alternative file to receive ordinary compiler output (includes compilation and execution). Default is stdout

−**R** *traceFileName*
Specify an alternative file to receive compiler trace information. Default for trace information is stdout.

−**U** *dumpFileName*
Specify an alternative file to receive compiler dump information. Default for dump information is stdout.

−**I** *runInputFileName*
Specify an alternative file to serve as a source of input during execution of the compiled program. Default for execution time input is stdin.

ENVIRONMENT

The compiler does not use any Unix environment variables.

SEE ALSO

The CSC488S course news group ut.cdf.csc488h

AUTHORS

The **compiler488** skeleton was conceived and implemented by Profs. David B. Wortman (machine interpreter and general structure) and Marsha Chechik (scanner, parser). They can be reached at dw@cdf.toronto.edu and chechik@cdf.toronto.edu, respectively.

Parse tree creation, semantic analysis, code generation and the symbol table mechanisms were skillfully designed and implemented by **PUT YOUR NAMES HERE**

BUGS

There are none; only a few unexpected features.