

# Dorsey Micro Pascal User Manual

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## Introduction

This is the user manual for the Dorsey Micro Pascal compiler. The compiler compiles a Micro Pascal program into MIPS Assembly. This user manual has the following sections; usage, and errors, where the information accompanying these topics can be found.

## Usage

To use this program make sure that the jar file of the compiler, and the micro pascal file you wish to compile, are in the same folder/directory. Once they are in the same directory/folder enter the following command.

```
java -jar MyCompiler.jar <filename>.pas
```

Where it says <filename> replace this with the actual name of your file. Example: helloworld.pas.

## Errors

If an error similar to this appears in the terminal:

```
Exception in thread "main" java.lang.RuntimeException: No file
```

```
    at parser.Parser.error(Parser.java:1063)
```

```
    at parser.Parser.<init>(Parser.java:72)
```

```
    at compiler.CompilerMain.main(CompilerMain.java:46)
```

This error means that a file was not entered, was misspelled, or the file was not able to be seen. Check to make sure that you entered `java -jar MyCompiler.jar filename.pas` and that the filename is spelled correctly. Also check to make sure that in the terminal you have navigated to

the place that your pascal file is in so it can be seen, or move the file to the location of the jar file.

If an error similar to this appears in the terminal:

Exception in thread "main" java.lang.RuntimeException: Match of PROGRAM found ID instead.

```
at parser.Parser.error(Parser.java:1063)
at parser.Parser.match(Parser.java:1046)
at parser.Parser.program(Parser.java:106)
at compiler.CompilerMain.main(CompilerMain.java:49)
```

This error means that you entered a full pascal language program where as the compiler is built for a micro version of the pascal language. This error will also occur if a program using any other language besides the micro pascal is passed in. If you passed in a micro pascal program and still received this error, it means you have an issue in your grammar and need to check the syntax of your micro pascal code.

If an error similar to this appears in the terminal:

Exception in thread "main" java.lang.NullPointerException

```
at dorseyparser.Parser.match(Parser.java:1018)
at dorseyparser.Parser.program(Parser.java:100)
at compiler.CompilerMain.main(CompilerMain.java:36)
```

It means that your micro pascal program has no code in it, meaning that it is an empty file. To fix this issue actually write some code. This error will also occur for text and document type file extensions. So also check to see the extension type of the file that was passed in.