

<b>Project:</b>	Create program <b>pasm</b> that assembles P-Code instructions into a P-Machine Executable File. Project p04 is divided into six (6) sections. Each section is dependent on the previous section. Each new section has all of the code implementing the previous section. Sections are titled p04.1, p04.2, ..., p04.6. Specifications for a P-Code source file are discussed in the instructions for each of the sections of this project. Specifications for a P-Machine Executable File can be found using this URL ( <a href="https://cs2.uco.edu/~trt/cs5023/pexecutable.pdf">https://cs2.uco.edu/~trt/cs5023/pexecutable.pdf</a> ).								
<b>Prohibition:</b>	<b>You are prohibited from using any source that you did not create yourself unless given specific permission by your instructor. You must design, implement, and test all source that is not given to you by your instructor. The penalty for using prohibited source material is that your project will be assigned as score of zero (0).</b>								
<b>Program Files:</b>	<b>Naming conventions.</b> All source files have the prefix <b>pasm</b> and the executable file name is <b>pasm</b> . Given below is an example of program file names that could be components of program <b>pasm</b> .								
<b>Command Line:</b>	<table border="1"> <thead> <tr> <th>File</th><th>Description</th></tr> </thead> <tbody> <tr> <td><b>mkpasm</b></td><td>File <b>mkpasm</b> contains Unix commands to invoke the makefile <b>makepasm</b> and remove any source files that were created in the translation process.</td></tr> <tr> <td><b>makepasm</b></td><td>File <b>makepasm</b> contains instructions to cream program <b>pasm</b>. Instructions are written for the <i>Unix</i> utility <b>make</b>.</td></tr> <tr> <td><b>pasm.cpp</b></td><td>File <b>pasm.cpp</b> contains function main and processes command line arguments.</td></tr> </tbody> </table>	File	Description	<b>mkpasm</b>	File <b>mkpasm</b> contains Unix commands to invoke the makefile <b>makepasm</b> and remove any source files that were created in the translation process.	<b>makepasm</b>	File <b>makepasm</b> contains instructions to cream program <b>pasm</b> . Instructions are written for the <i>Unix</i> utility <b>make</b> .	<b>pasm.cpp</b>	File <b>pasm.cpp</b> contains function main and processes command line arguments.
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Project 4 can be invoked with zero or one program parameters. The first program parameter is the input file name. Sample command lines together with corresponding actions by program <b>pasm</b> are shown below. Boldfaced type indicates data entered at the keyboard by the user. <b>\$ <i>pasm</i></b> Enter the input file name: <b>p00.pcd</b>  <b>\$ <i>pasm p00.pcd</i></b>									
<b>Input File:</b>	The input file contains a P-Code Assembler Program. The input file name must have the suffix <b>.pcd</b> . Please refer to the P-Code Source File Specification given later in this document for an example of the format of an input file.								
<b>Output File:</b>	The name of the output file has the same prefix as the input file and the four-character suffix, <b>.pcd</b> is replaced by the four-character suffix <b>.pex</b> . For example, if the name of the input file was <b>p00.pasm</b> , the name of the output file is <b>p00.pex</b> .  Please refer to the P-Machine Executable File format given later in this document for a specification of the output file.								