

HP42S Code Editor Ver 1.0.2

HP42S Code Editor is a program for editing HP42S code and converting the text code to raw format used by HP42 simulators like Free42 and Emu42. Raw files can also be imported and will be converted to HP42S code.

The program was written in Delphi 7(Pascal). The program is tested on Win XP Pro and Win 7 Pro. It's not tested on Win 8

The code editor uses the HP42SCharSet 3 (char42s.ttf) by Luiz C Vieira.

Installation:

Unzip the zipped file. There will be a directory: **[HP42S Code Editor 1.0]** containing following files:

- a) The program: **HP42SCodeEditor.exe**
- b) A dll file used for Perl Regular Expression: **pcrelib.dll**
- c) A directory:**[Font]** with the **char42s.ttf** font used in the program.
- d) A directory:**[42SProg]** with some *.42S sample files.
- e) A directory: **[RawProg]** with some *.raw files mostly from Free42 website.

Install the font by copying it to the font directory in your system. Usually in the control panel for Win XP.

The default directories for text code and raw code are **42SProg** and **RawProg**. Don't remove or rename them. Of course you can open/save files from/to other locations.

Menus:

File:

- **Open 42S Code:** Open a HP42S text file in the format *.42S. It's mainly a text file but with HP42S special characters. Tst2Raw text files are not supported at the moment.
- **Save 42S Code:** Saves the code in the HP42S CODE window in the *.42S format.
- **Open Raw File:** Opens a *.raw file and converts it to HP42S code format. The hex code is in the HP42S HEX window but the checkbox (HP42S HEX) have to be checked to see the hex code.
- **Save Raw File:** Saves a raw file. When HP42S code is present in the HP42S CODE window the code have to be converted to Hex code by pressing the button Code->Hex.
- **Print HP42S Code(Grayed Out):** This is a future option.
- **Exit:** Exits the program.

Tools:

A set of tools for programming.

- **HP42S Char:** A palette of special characters. By clicking the character it will be copied to the HP42S CODE window at the cursor position.

- **ModOpCode:** A palette with mod opcodes. By clicking the mod opcode it will be copied to the HP42S CODE window at the cursor position.
- **FixOpCode:** Listboxes with fixed opcodes. Its sorted under several titles. By selecting a title in the first box a second list will show in the second box with opcode related to the first box. By clicking on the opcode it will be copied to to the HP42S CODE window at the cursor position.
- **Flags:** This is a list of the flags used in the HP42S calculator.
- **RegVarLbl:** By selecting one or more checkboxes and pressing **Scan button** a list of regs, vars labels and MVAR together with the corresponding line number will show up in the text box. All occurrences of an item will show up. So if for ex LBL 01 is used 5 times in the code it will show up 5 times. By double clicking on the line number in the text box, the corresponding code will be selected and highlighted in the HP42S CODE window

Buttons:

- **Clear Code:** Will clear the text in the HP42S CODE window.
- **Code->Hex:** Converts the HP42S op code to hex code. The checkbox (HP42S HEX) have to be checked to see the hex code. There will be some error checking and the error will show up in the HP42S HEX window at the corresponding line. There will be a list of errors as well in the INFO text box together with line number.
- **ClearHex:** Will clear the text in the HP42S HEX window.
- **Hex->Code:** Converts the hex code in the HP42S HEX window to HP42S Code.

Other features:

- **Comments:** Comments are supported in the code in the form: @ comment. However starting a line with a comment is not supported at the moment.
- **Help on op code:** By double clicking an op code in the HP42S CODE window a short explanation of the code will show up in the INFO text box.

RAW files:

The program is tested with raw files mostly from Free42 webpage. Almost all files imports and converts to op code. There have however been some issues with files probably converted from HP41 or with some binary information still present from HP41 internal hex code.

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