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Dissector

Dissector disassembles 6502 code. As of now, this is a commandline-tool. This might change in the future. It runs on 64 bit versions of Linux, MacOS, Windows and other systems supported by Python.

Why Dissector?

reason	description
open source	easy to modify and to improve, any useful contribution is highly welcome
portable	available on Linux, MacOS, Windows and any other system supported by Python3
illegals	full illegal opcode support
cycles	used cpu-cycles shown for each opcode
extensive info	extensive C64 memory map carefully gathered from best sources I could find online
assemblers	ACME and KickAssembler supported, easy to implement other assemblers

Usage

dissector v1.00 [21.08.2021] *** by fieserWolf

usage: dissector.py [-h] [-lf LABEL_FILE] [-o OFFSET] [-l LIMIT] [-t {acme,kickass}] [-d] [-

This program disassembles 6502 code.

positional arguments:

input_file	binary input file
output_file	sourcecode output file
startaddress	startaddress in hex

optional arguments:

-h, --help	show this help message and exit
-lf LABEL_FILE, --label-file LABEL_FILE	labels json-file, default="c64labels.json"
-o OFFSET, --offset OFFSET	offset in hex
-l LIMIT, --limit LIMIT	limit in hex

```
-t {acme,kickass}, --asmtype {acme,kickass}
                                assembler-type
-d, --dump                      show memory-dump
-i, --illegals                  use illegal opcodes
-ll, --labels                   show label-list
-cc, --cycles                   show cycles
```

Example: `./dissector.py test.prg test.a 2000 -lf c64labels.json -o 2 -l 100 -t acme --dump -`

Have a good look in `/doc`.

C64 information sources

Graham's 65xx resources <http://www.oxyron.de/html/opcodes02.html> Copyright 2002-2012 Graham. Last change on 03.11.2012.

book: Mapping the C64 http://unusedino.de/ec64/technical/project64/mapping_c64.html

Commodore 64 RAM Memory Map V1.2, published 1 Sep 1994 <ftp://arnold.c64.org/pub/docs/C64rom.lib> <ftp://arnold.c64.org/pub/docs/C64ram.doc>

Author

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Getting Started

Run the Python3 script directly

Download *dissector.py* and *c64labels.json* into the same folder on your computer.

```
python3 dissector.py
```

Prerequisites

At least this is needed to run the script directly:

- python 3
- argparse

Normally, you would use pip like this:

```
pip3 install argparse
```

On my Debian GNU/Linux machine I use apt-get to install everything needed:

```
apt-get update  
apt-get install python3 python3-argh
```

Changelog

Future plans

- maybe: implement full GUI

Any help and support in any form is highly appreciated.

If you have a feature request, a bug report or if you want to offer help, please, contact me:

<http://csdb.dk/scener/?id=3623> or wolf@abyss-connection.de

Changes in 1.0

- initial release

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Dissector 6502 disassembler.

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Version 3, 29 June 2007

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Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

```
<program> Copyright (C) <year> <name of author>  
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```

The hypothetical commands `show w` and `show c` should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an “about box”.

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Python 3 license

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