Binary converter

There is a tool in DSX python library called elf2blob. It uses objcopy to repackage an elf image to a blob.

It is useful for concatenating different sections to a single image.

It supports:

- Any binutils-supported target for input
- Binary blob, Intel-HEX, and MIF output

Usage

If you have your python path correctly set up (See DsxInstall), you can call `python -m bintools.elf2blob`.

```
$ python -m bintools.elf2blob --help
Usage: elf2blob.py [options]

Options:
  -h, --help            show this help message and exit
  -c OBJCOPY, --objcopy=OBJCOPY
                        Use given objcopy
  -s SECTIONS, --section=SECTIONS
                        Add section:byte_offset to output file
  -O OUT_FMT, --output-format=OUT_FMT
                        Output file type (binary, hex or mif)
  -o OUTPUT, --output=OUTPUT
                        Output file name
  -w WIDTH, --width=WIDTH
                        MIF word width
  -S SIZE, --size=SIZE  Blob size (bytes)
$
```

`-s`
: May be given more than once to add many sections

Example

Let's create a blob:

- to initialize an 8-KiB altera ram (MIF output), in file named `sram.mif`,
- from a mips binary named `kernel-soclib-mips32el.out`,
- with:
    - .boot at 0
    - .excep at 0x20
    - .text at 0x1400

```
$ python -m bintools.elf2blob \
    -c mipsel-unknown-elf-objcopy \
    -s .boot:0 -s .excep:0x20 -s .text:0x1400 \
    -O mif -o sram.mif \
    kernel-soclib-mips32el.out
$
```