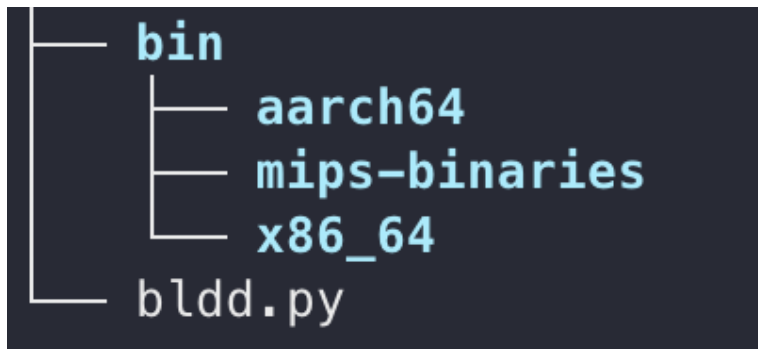# IU-Advanced-Linux-Assignment-1

Project structure

Initially I downloaded the binaries of some architectures, which are in the bin folder

- `aarch64` - was taken from my Raspberry Pi
- `mips` - https://github.com/darkerego/mips-binaries
- `x86` - was taken from my server

BLDD

So, let's try my code

```
python bldd.py -h
```

```
usage: bldd.py [-h] [--report {text,latex}] [--output OUTPUT] [--arch ARCH] path
```

```
positional arguments:
  path                 Please specify path to folder

options:
  -h, --help           show this help message and exit
  --report {text,latex}
                       Type of report
  --output OUTPUT      File to write report
  --arch ARCH          Specify architecture to search

Print usages of libraries for all architectures
python bldd.py directory_name
Example: python bldd.py bin

Write report to txt file
python bldd.py --output=filename directory_name
Example: python bldd.py --output=report.txt bin

Write report to latex file
python bldd.py --report=latex --output=filename directory_name
Example: python bldd.py --report=latex --output=report.tex bin

Print usages of libraries for specified arch
python bldd.py --arch=name directory_name
Example: python bldd.py --arch=MIPS binÏ
```

Usage of libraries for all architectures

```
python bldd.py bin
```

```
BLDD report for bin
MIPS
libc.so.0 (3 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/dbd-generic
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/synflood
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/proxychains4
libc.so.6 (3 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/wget
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/curl
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/axel
libmatrixssl.so (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/wget
libtcapi.so.1 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/wget
libdl.so.2 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/wget
libpython2.7.so.1.0 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/python
```

```
libpthread.so.1 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/python
libdl.so.1 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/python
libutil.so.1 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/python
libm.so.1 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/python
libc.so.1 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/python
ld-uClibc.so.0 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/proxychains4
libcurl.so.4 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/curl
libpthread.so.0 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/axel

X86_64
libc.so.6 (66 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/binutils/sysinfo
<65 LINES OMITTED>
libapt-private.so.0.0 (9 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/x86_64/apt-sortpkgs
<8 LINES OMITED>
libapt-pkg.so.6.0 (9 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/x86_64/apt-sortpkgs
<8 LINES OMITED>
libstdc++.so.6 (9 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/x86_64/apt-sortpkgs
<8 LINES OMITED>
libgcc_s.so.1 (9 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/x86_64/apt-sortpkgs
<8 LINES OMITED>
libtinfo.so.6 (5 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/x86_64/captoinfo
<46 LINES OMITED>

AARCH64
libc.so.6 (30 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/aarch64/aarch64-linux-gnu-c++filt
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/aarch64/aarch64-linux-gnu-gcc
<77 LINES OMITED>
```

Usage of libraries for all architectures

```
python bldd.py --arch=MIPS bin
```

```
BLDD report for bin
MIPS
libc.so.0 (3 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/dbd-generic
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/synflood
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/proxychains4
libc.so.6 (3 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/wget
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/curl
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/axel
libmatrixssl.so (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/wget
libtcapi.so.1 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/wget
libdl.so.2 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/wget
libpython2.7.so.1.0 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/python
libpthread.so.1 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/python
libdl.so.1 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/python
libutil.so.1 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/python
libm.so.1 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/python
libc.so.1 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/python
ld-uClibc.so.0 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/proxychains4
libcurl.so.4 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/curl
libpthread.so.0 (1 executables)
        -> /Users/egor-vlasov/src/IU/IU-advanced-linux/lab-1/bin/mips-binaries/axel
```

Txt Report

```
python bldd.py --output=report.txt bin
```

Latex Report

```
python bldd.py --report=latex --output=report.tex bin && pdlatex report.tex
```