

**NAME**

Md\_py.py- Python code for generating synthesizable Verilog HDL for a multistage pipeline register.

**DESCRIPTION**

Python md\_py.py [OPTIONS][PARAMETERS]

md\_py is a python code which generates a Verilog code for a multistage shift register. The generated Verilog code is synthesizable. User provides required width, stages and reset value for the register. Width is the operand width and should be from 1 to 64 while stages is the number of pipeline stages and the decimal value should be from 2 to 128.

**OPTIONS**

--help or -h: Prints the command line options.

--param or -p: input parameter file name

--width or -w: Enter the operand width (decimal value from 1 to 64)

--stages or -s: Enter the number of pipeline stages (decimal value from 2 to 128)

--reset or -r: Enter the reset value of the register in decimal or hex

--outfile or -o: Enter the desired verilog file name

*Example terminal commands:*

```
python md_py.py --param param.txt
```

```
python md_py.py -p param.txt
```

```
python md_py.py --width 5 --stages 6 --reset 2 --outfile ver.v
```

```
python md_py.py -w 5 -r 8 -s 6 -o chkreg.v
```

```
python md_py.py --help
```

```
pydoc md_py
```

Example parameter text file:

```
width = 16;
```

```
stages = 10;
```

```
outfile = chkreg.v;
```

```
reset = 8;
```

## **BUGS**

If you find any bug please send an email to [md6625@rit.edu](mailto:md6625@rit.edu).

## **AUTHOR**

Mayank Dhull

## **COPYRIGHT**

This python code is free to use and can be used under the terms of Rochester Institute of Technology Copyright policy C03.2.