

\* FPGA:- The first FPGA project help students to understand the Basis of FPGAs and how verilog / VHDL works on FPGA

\* D-flipflop code:-

```
module d_ff (clk, d, q, q-bar)
input d, clk;
output q, q-bar;
wire d, clk;
reg q, q-bar;
always @ (posedge clk)
begin
q <= d;
q-bar <= !d;
end
endmodule.
```

\* Bottom up design:- Each designed is performed at the gate level using the standard gates with increasing complexity of the designs this approach is slowly impossible to maintain.

\* Top-down Design:- A Real Top down design Allows Early Testing easy of different Technologies a structured s/m design and offer many other Advantages.

\* Abstraction levels of Verilog:-

\* Behavioral level

\* Registered-transfer level.

\* Gate-level.

\* Data types

There are two primary data types:-

\* Nets &

\* Registers

## python Repost

- \* Flask startup and configuration like most widely used Python libraries, the flask package is installable from the Python package Index (PPI).
- \* First we should create a directory to work in i.e., (flask-todo) is then install the flask package.
- \* We have install flask-sqlalchemy so our flask Application has a simple way to talk to a sql database.
- \* We should create setup.py which should look like this

```
requires = [  
    'flask'  
    'flask-sqlalchemy',  
    'psycopy2',  
]
```

```
setup(  
    name = 'flask-todo'  
    version = '0.0'  
    description = 'A To-Do List Built with Flask'  
    author = '<your actual name here>  
    keywords = 'web flask'  
    packages = find_packages  
    include_package_data = True  
    install_requires = requires.  
)
```

This is the way whenever we want to install / deploy our project,