* Implement Inverter using the EDA Tool:-

=>
```
module inverter (y,a);
output y;
input a;
assign y=~a;
end module
```

=> Test bench code

```
timescale 1ns/1ps
module testbench();
reg a1;
wire y1;
inverter inv1 (a1,y1);
initial begin
a1 : a'b1
$display ("a=1-b,a1);
end
end module.
```

* Ripple carry counter:-

```
module ripple_counter_4_bit (q, clk, reset);
input clk, reset;
output [3:0] q;
T_FF tff0 (q[0], clk, reset);
T_FF tff1 (q[1], q[0], reset);
T_FF tff2 ( q[2], q[1], reset);
T_FF tff3 (q[3], q[2], reset);
end module
module T_FF (q, clk, reset);
input clk, reset;
output q;
wire d;
D_FF dff0 (q,d, clk, reset);
not n1 (d,q);
end module
```

```
Module D-FF (q, d, clk, asrt);
input d, clk asrt;
output reg q;
always @ (negedge clk or posedge asrt)
 begin
 else
 q <= d
 end
 end module
```

=> test bench code

```
module test
reg clk, asrt;
wire [3:0] q;
ripple_carry_counter acc(q, clk, asrt);
 initial begin
 $ dumpfile ("dump.vcd");
 clk = 1'b0;
 asrt = 1'b1;
#10 asrt = 1'b0;
end
always #5 clk = ~clk;
 end module
```

* Scraped website Data → How the output will look.
* Extracting the Elements without unique identifiers
* saving the Extracted data in csv files.
* firstly, from flask import flask, render_template.

```
app=Flask(__name__)
@app.route('/plot/')
def plot();
from pandas_data reader import data
import datatime
import fix_yahoo_finance as yf
yf.pdr_override()
from bokeh.plotting import figure, show, output_file.
from bokeh.embed import components.
from bokeh.resources import CDN.
def inc_dec(c,o);
if c>o;
Value = "Increase"
elif c<o
value = "Decrease"
else:
Value="equal"
return value
df["middle"]= [df.open+df.close]/2
df["Height"]= abs(df.close-df.open)
p.title.text = "Candle stick chart"
p.grid.line_alpha=0.3
Script1, div1 = components(p)
cdn_js = CDN.js_files[0]
```

```
cdn_js = CDN.css_files[0]
return render_template("plot.html",
 script = script1,
 div1 = div1;
 cdn_css = cdn_css,
 cdn_js = cdn_js).//,
```
