

Section of the tb\_XXX.v file

```
`timescale 1ns/10ps
```

```
module tb_maths1;
```

```
reg [15:0] x;
```

```
reg [15:0] y;
```

```
wire [15:0] vm, vb, vc;
```

***The lines below define the location and name of the vcd file.  
This also defines the name of module to be sent to vcd file***

```
initial begin
```

```
    $dumpfile("vcd/maths1.vcd");
```

```
    $dumpvars(0, tb_maths1);
```

```
end
```

***The next lines provide for the communication between MyHDL  
and the Co-Simulation***

```
initial begin
```

```
    $from_myhdl(
```

```
        x,
```

```
        y
```

```
    );
```

```
    $to_myhdl(
```

```
        vm,
```

```
        vb,
```

```
        vc
```

```
    );
```

```
end
```

***The next lines instantiate several modules mm\_maths1, mb\_maths1, and mc\_maths1  
to be stimulated by MyHDL or by stimulus in the tb\_XXX.v***

```
/** the myhdl verilog */
```

```
mm_maths1 dut_myhdl(x, y, vm);
```

mm\_maths1 in the line above is the name of the module in the file mm\_math1.v

```
/** the bluespec verilog */
```

```
wire clock, reset;
```

```
mb_maths1 dut_bsv(clock, reset, x, y, vb);
```

```
/** the chisel verilog */
```

```
mc_maths1 dut_chisel(x, y, vc);
```

```
endmodule
```