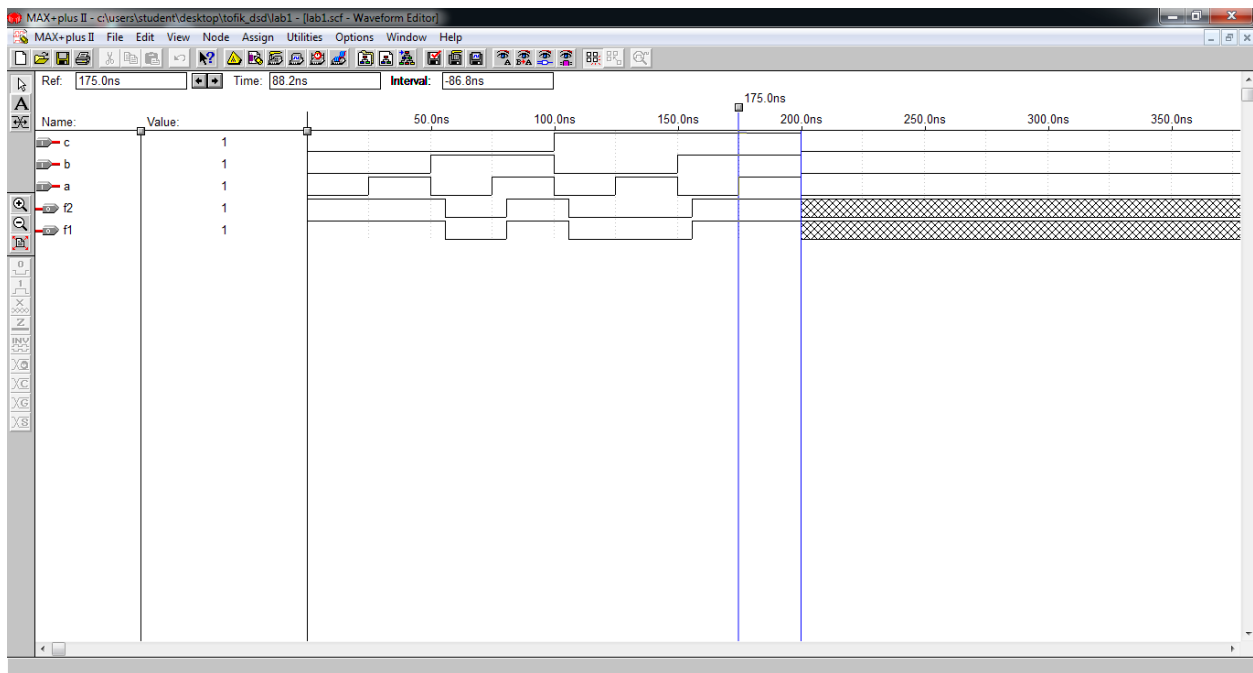


Week1 lab1

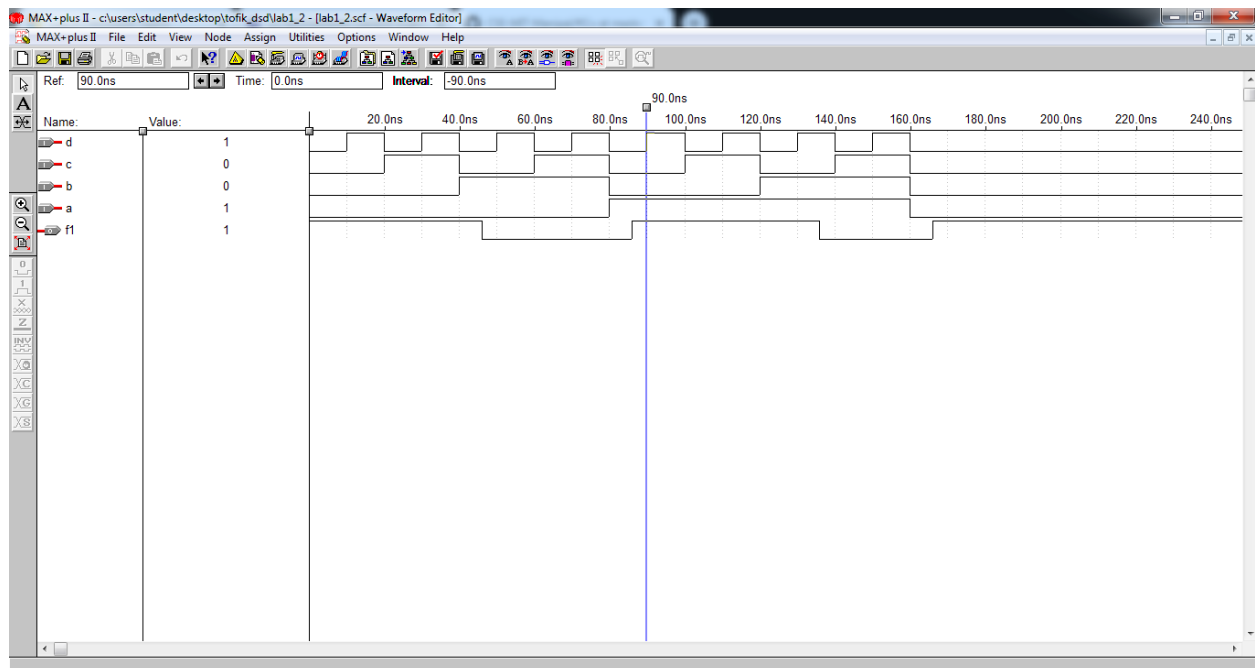
PROGRAM_1

```
module lab1(a,b,c,f1,f2);  
input a,b,c;  
output f1;  
output f2;  
assign f1=(a&~c)|(b&c)|(~b&~c);  
assign f2=(a|~b|c)&(a|b|~c)&(~a|b|~c);  
endmodule
```



Lab1 program2_1 :

```
module lab1_2(a, b, c, d, f1);  
input a, b, c, d;  
output f1;  
assign f1 = (~b & d) | (~b & c) | (a & ~c & ~d)|(~a&~b);  
endmodule
```



LAB1 PROGRAM_2_2

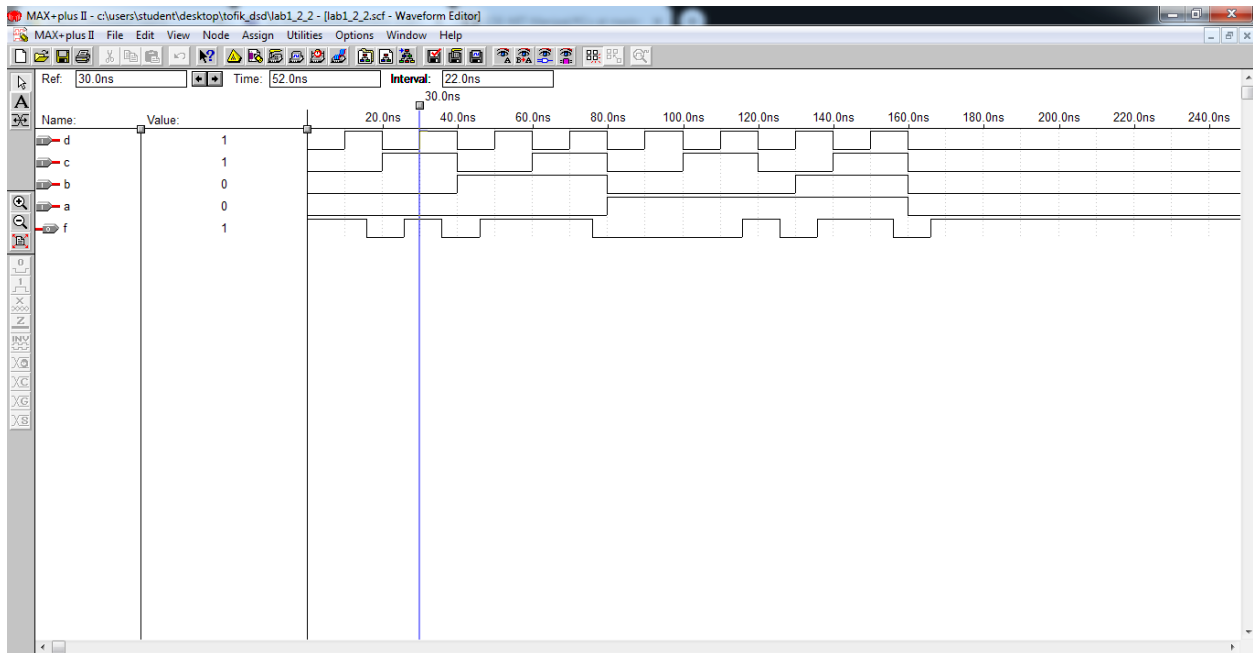
```
module lab1_2_2(a, b, c, d, f);
```

```
    input a, b, c, d;
```

```
    output f;
```

```
    assign f = (~b| ~c|~d) &(~a|b|c) &(~a|b| d)&(a|b|~d);
```

```
endmodule
```



PROGRAM_3 :

```

module exercise3(a,b,c,d,f);
input a,b,c,d;
output f;
assign f = ~(~(~(a&a)&b)&( ~(~(c&c)&d))));
endmodule

```

