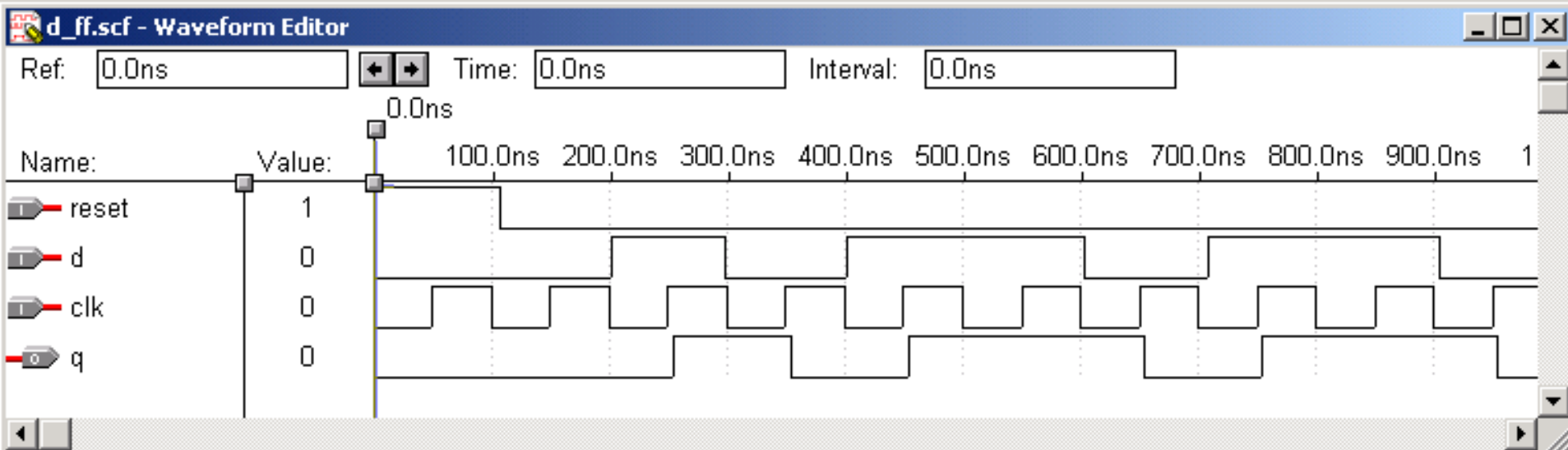




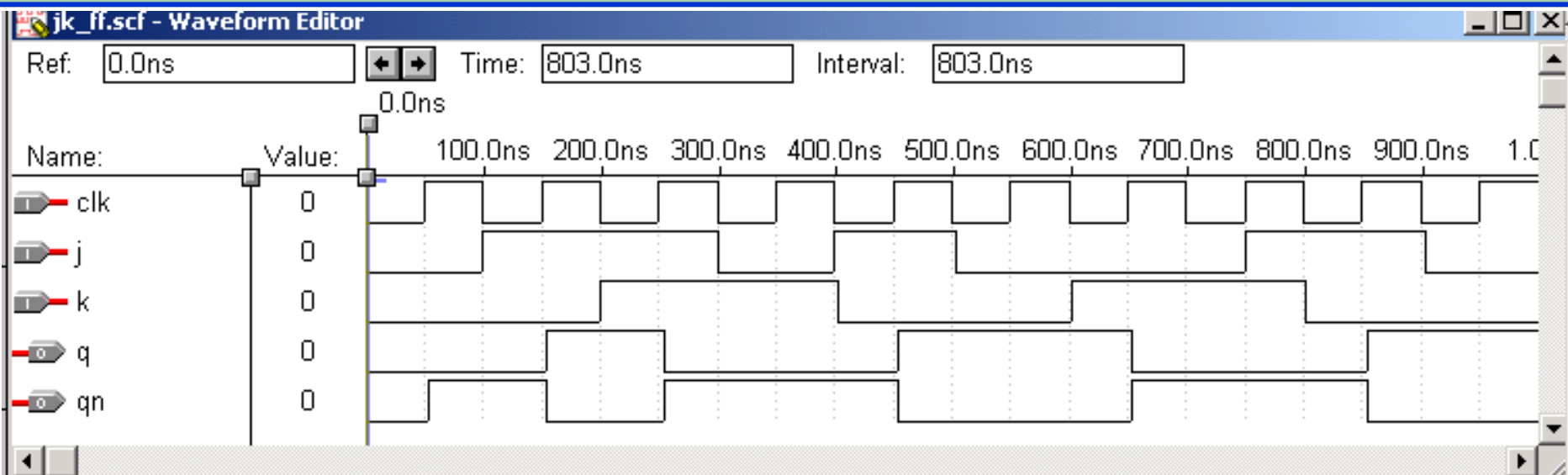
## 4.5 触发器的VHDL描述及其仿真

## [例4.5.1] 同步D触发器的VHDL描述和仿真



```
PROCESS (clk)  
BEGIN  
  IF clk'EVENT AND clk='1' THEN  
    IF reset='1' THEN  
      Q<='0';  
    ELSE q<=d;  
    END IF;  
  END IF;  
END PROCESS;  
END one;
```

## [例4.5.2] 边沿JK触发器的VHDL描述和仿真



**BEGIN**

**PROCESS (j,k,clk)**

**BEGIN**

**IF clk'EVENT AND clk='1' THEN**

**IF J='0' AND k='0' THEN**

**q\_s<= q\_s;**

**ELSIF J='0' AND k='1' THEN**

**q\_s<='0';**

**ELSIF J='1' AND k='0' THEN**

**q\_s<='1';**