**1. Modelar en una máquina de estados** el comportamiento de la hornilla principal de la estufa de su casa (o la de un vecino). Considere que dicha hornilla tiene 3 funcionamientos: mínimo, medio y máximo, los cuales son controlados por medio de una válvula de flujo de gas que puede tomar una de esas tres posiciones

Apagado

Girar Girar

[Izquierda] [Derecha]

Girar Girar

[Izquierda] [Derecha]

Encendido

Girar Girar

[Izquierda] [Derecha]

Girar Girar

[Izquierda] [Derecha]

Mínimo

Medio

Girar

[Derecha]

Mínimo

Medio

Girar

[Izquierda]

Máximo

Máximo

[no hay gas]

Sin gas

**10.1 what state is the CD player specified in the figure 10.13 in after the   
following sequences of events are detected? assume that a CD is always   
present when tested for:**  
  
a) Initialize, load*.(Open)*  
b) Initialize, load, play, stop. *(Closed)*  
c) Initialize, load, play, pause, play *(Paused)*  
d) Initialize, play, stop, load. *(Open)*  
e) Initialize, load, pause, play *(Playing)*

**10.2 the question refers to the dynamic model of the CD player given in figure 10.13. suppose that the player is turned off when it is the open state. with no CD in the drawer and the drawer open. and is then immediately powered on again. what state is the CD player in after these operations? what is the physical condition of the drawer of the CD player? what will happen if the user now presses the button? what buttons would the user have to press in order to close the drawer of the CD player?**  
**what state is the CD player in after these operations?**   
*Closed (Segun el diagrama)*  
  
**what is the physical condition of the drawer of the CD player?**   
*Open (Fisicamente )*  
  
**what will happen if the user now presses the button?**   
*Open (Logicamente)*  
  
**what buttons would the user have to press in order to close the drawer of the CD player?** *Play button and Load button*

**10.3 draw a revised version of figure 10.12 modelling the requirement that the CD player should remain paused even when 'stop' and then 'play' are pressed.**

Busy

Entry/find track start

pause pause

Not Playing

stop

Play

Playing

Do/ play back

[CD present]

H

[last track played]

Paused

[no last track]

/Increment track

play

**10.4 is a default transition required from the history state in the not playing state in figure 10.13? if not, why not?, if so, which substate should it go to?**

No, porque el superestado “Not Playing” tiene un History State que redirecciona a un “stop”

Pero esto no es necesario ya que desde el inicio el superestado inicia en “Closed”.