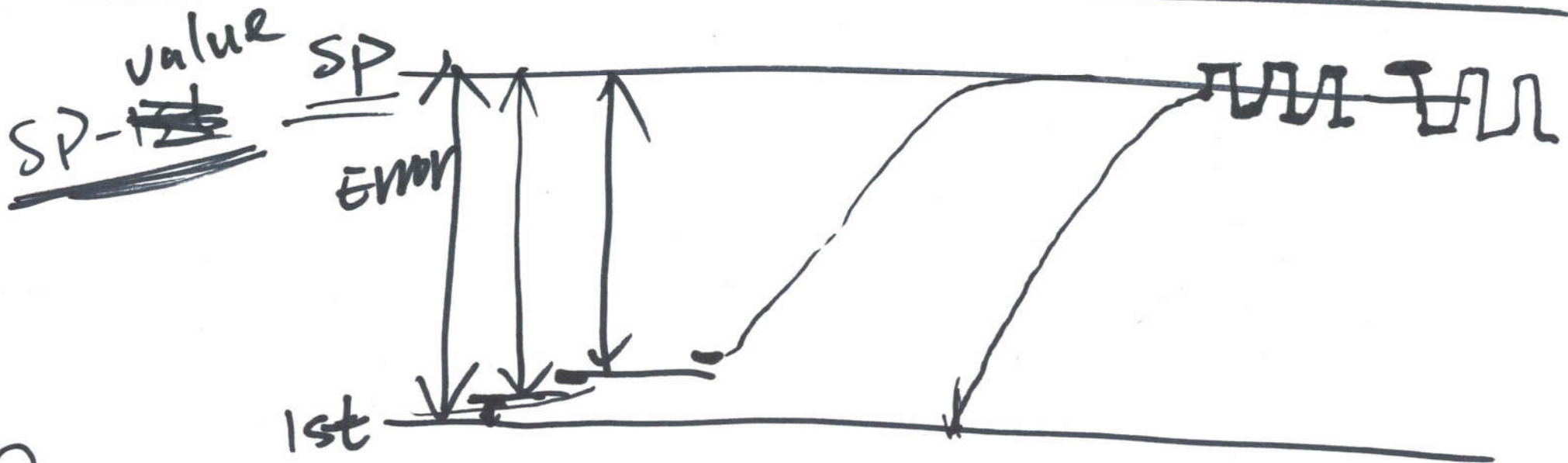


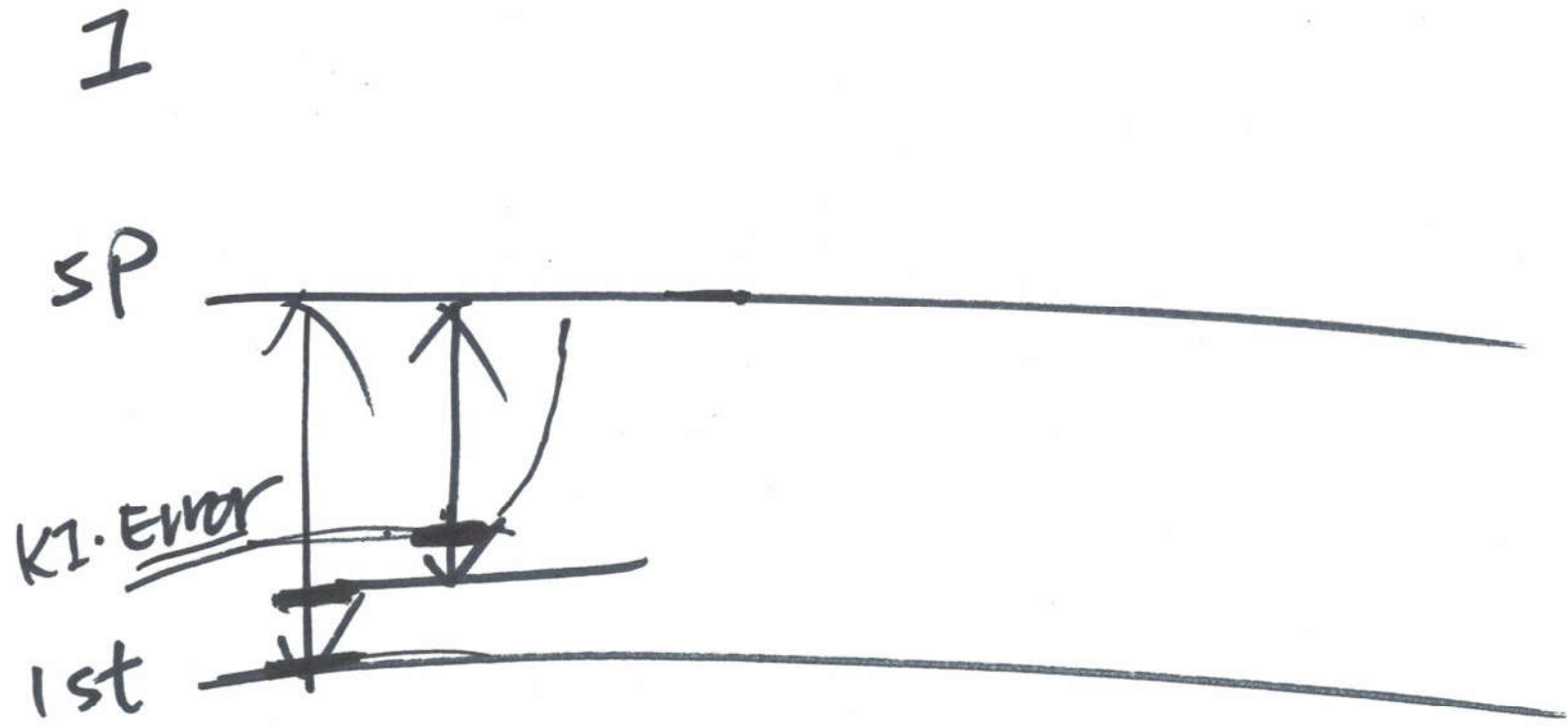
$$\textcircled{1} A = L \cdot w$$

$$\textcircled{2} L \cdot \int_0^D dw = L \cdot dw + L \cdot dw + \dots + L \cdot dw$$

$$= \underline{\underline{L \cdot (dw + dw + \dots + dw)}}$$



①



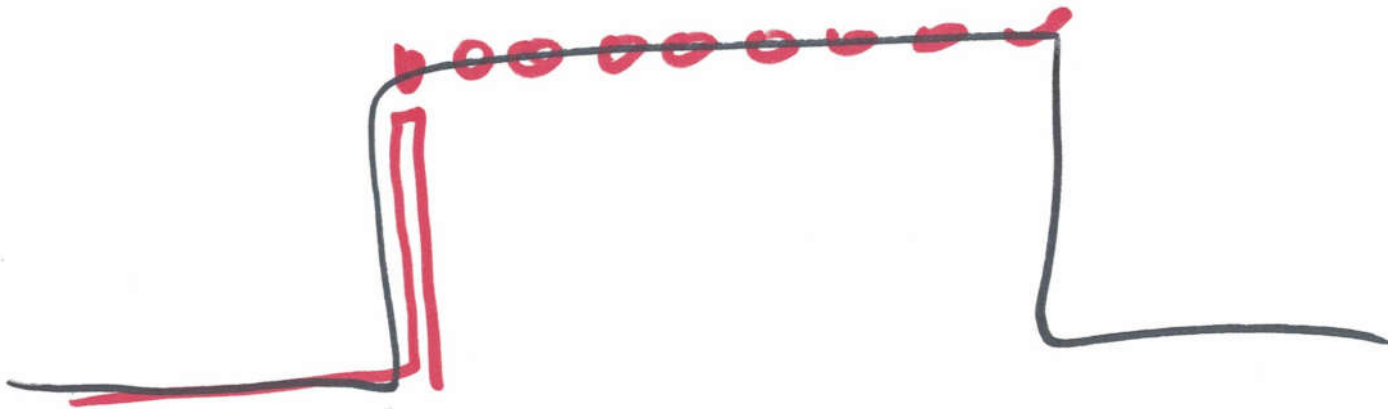
$$\text{Error} = \text{SP} - \text{1st}$$

$$\text{prev\_error} = \text{Error}$$

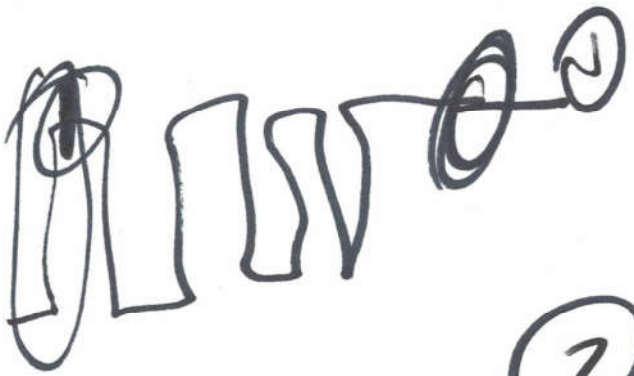
$$\text{Error} + = \text{prev\_error}$$

②

```
if ( pinOne == High )  
  { setPoint += 20; }
```



(3)



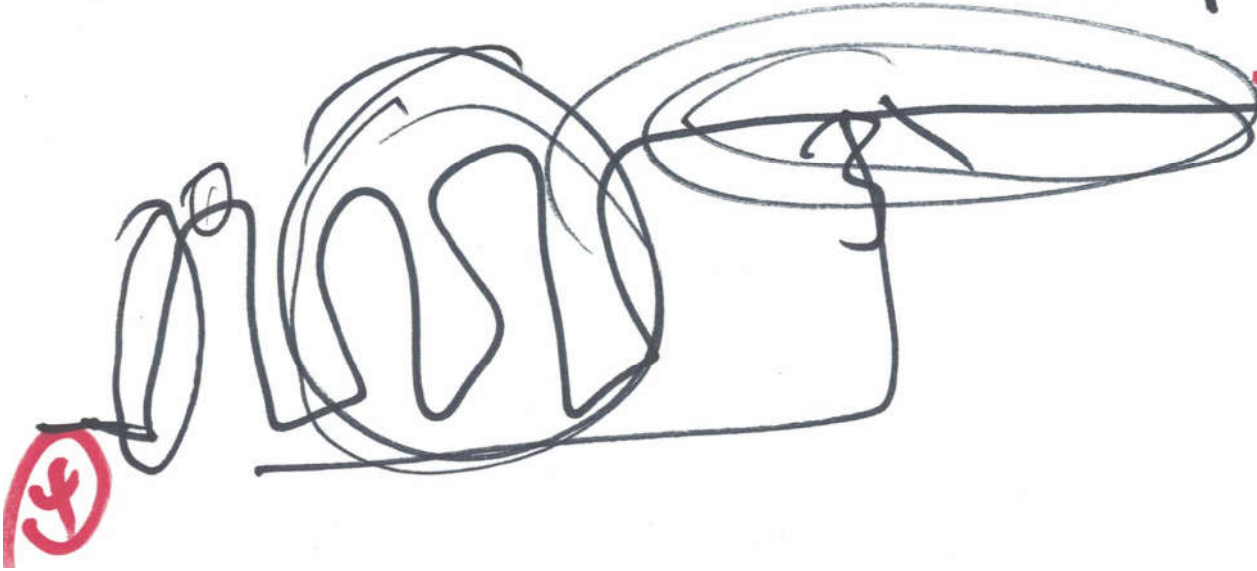
signal changes

(2)

changes from low to high

```
if (buttonState != PreState)
{
  if (buttonState == HIGH)
  {
    setPoint += 20;
  }
}
```

```
buttonState =  
PreState = buttonState  
delay(100);
```



(4)

