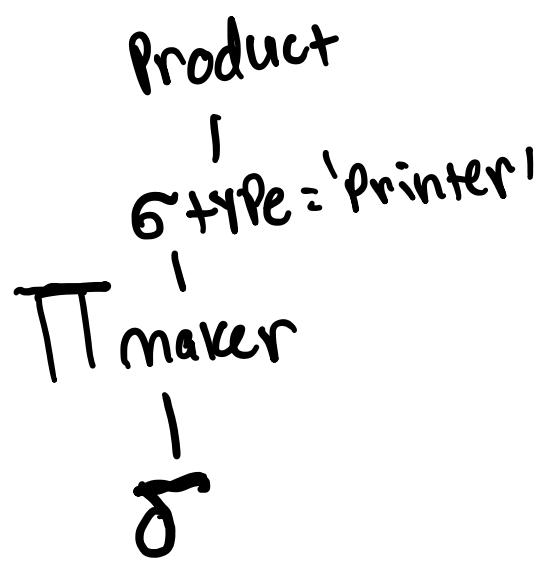


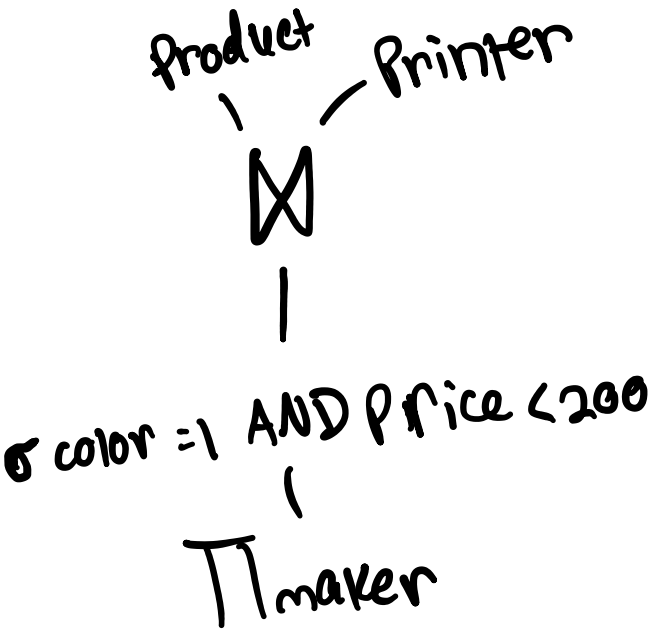
# Exam 1)

Wednesday, October 28, 2020 5:04 PM



Exam 2)

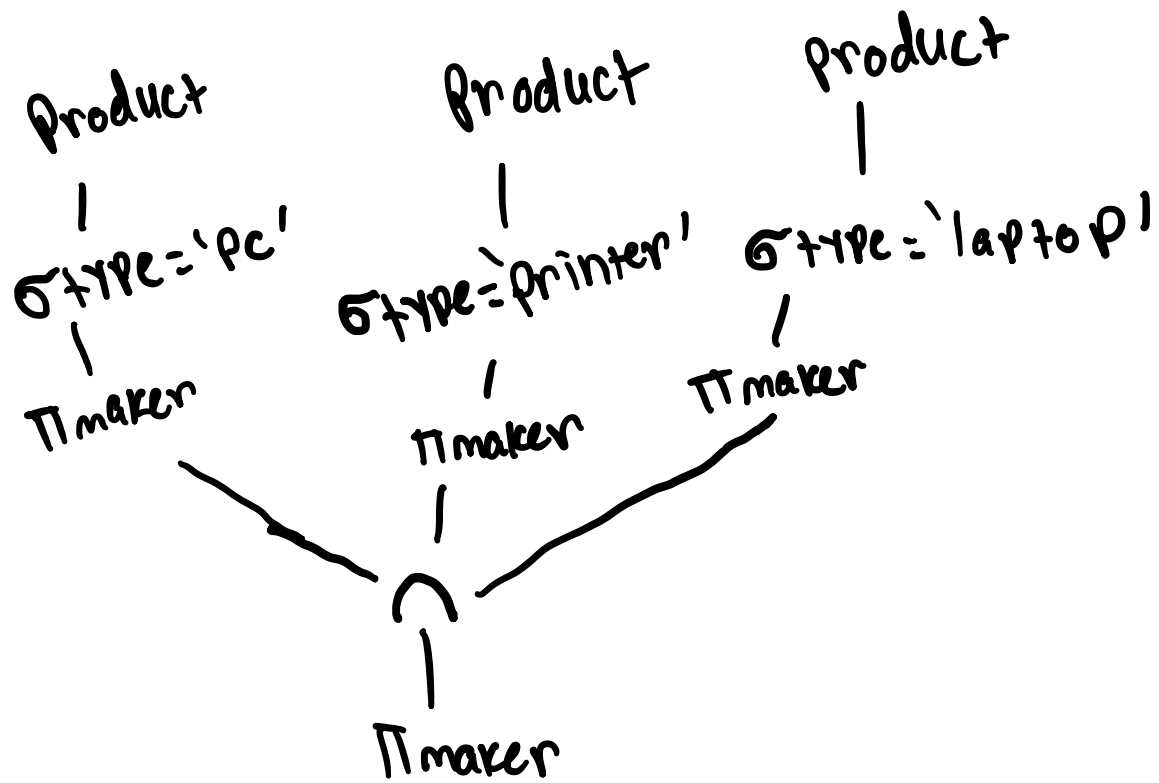
Wednesday, October 28, 2020 5:15 PM



# Exam 3)

Wednesday, October 28, 2020

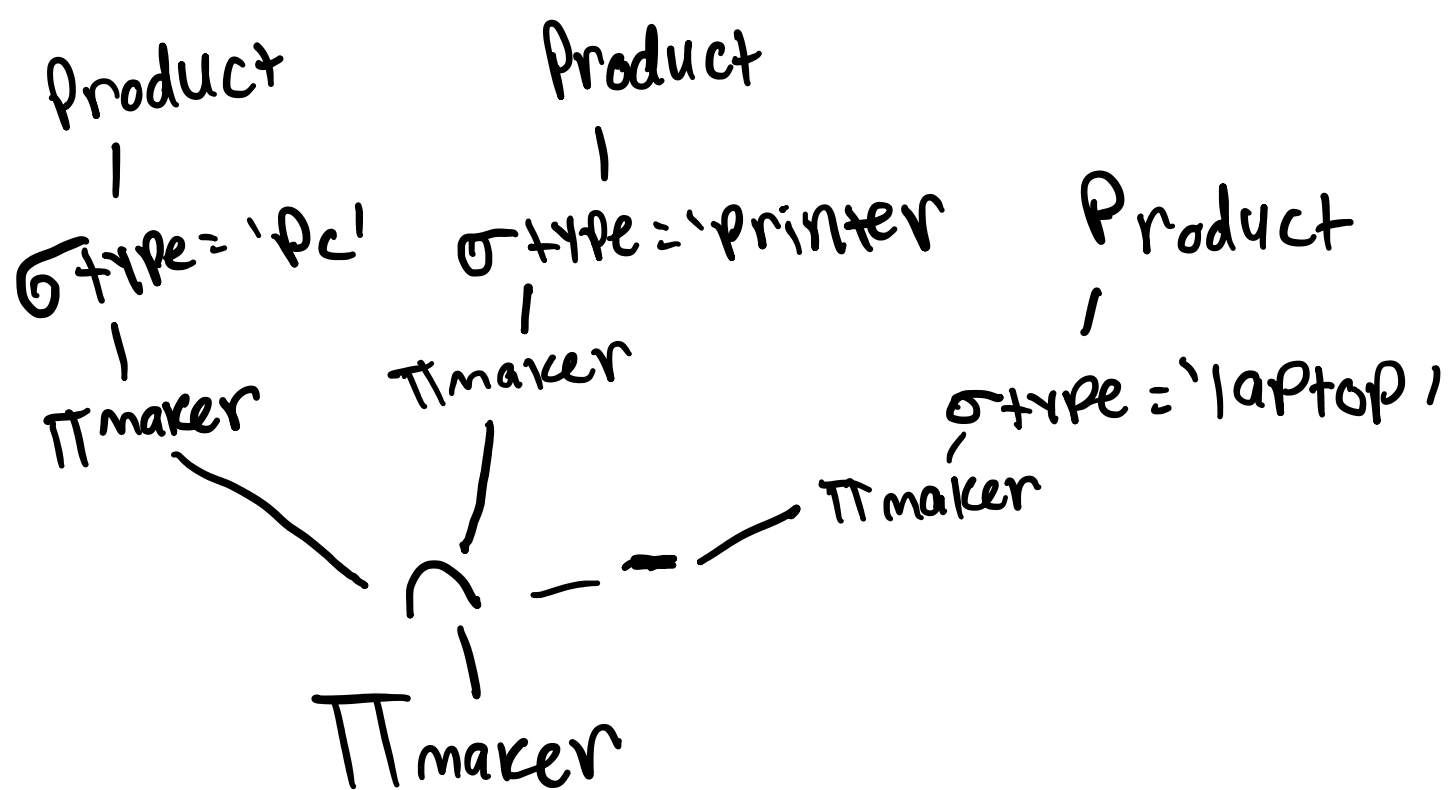
6:29 PM



# Exam 4)

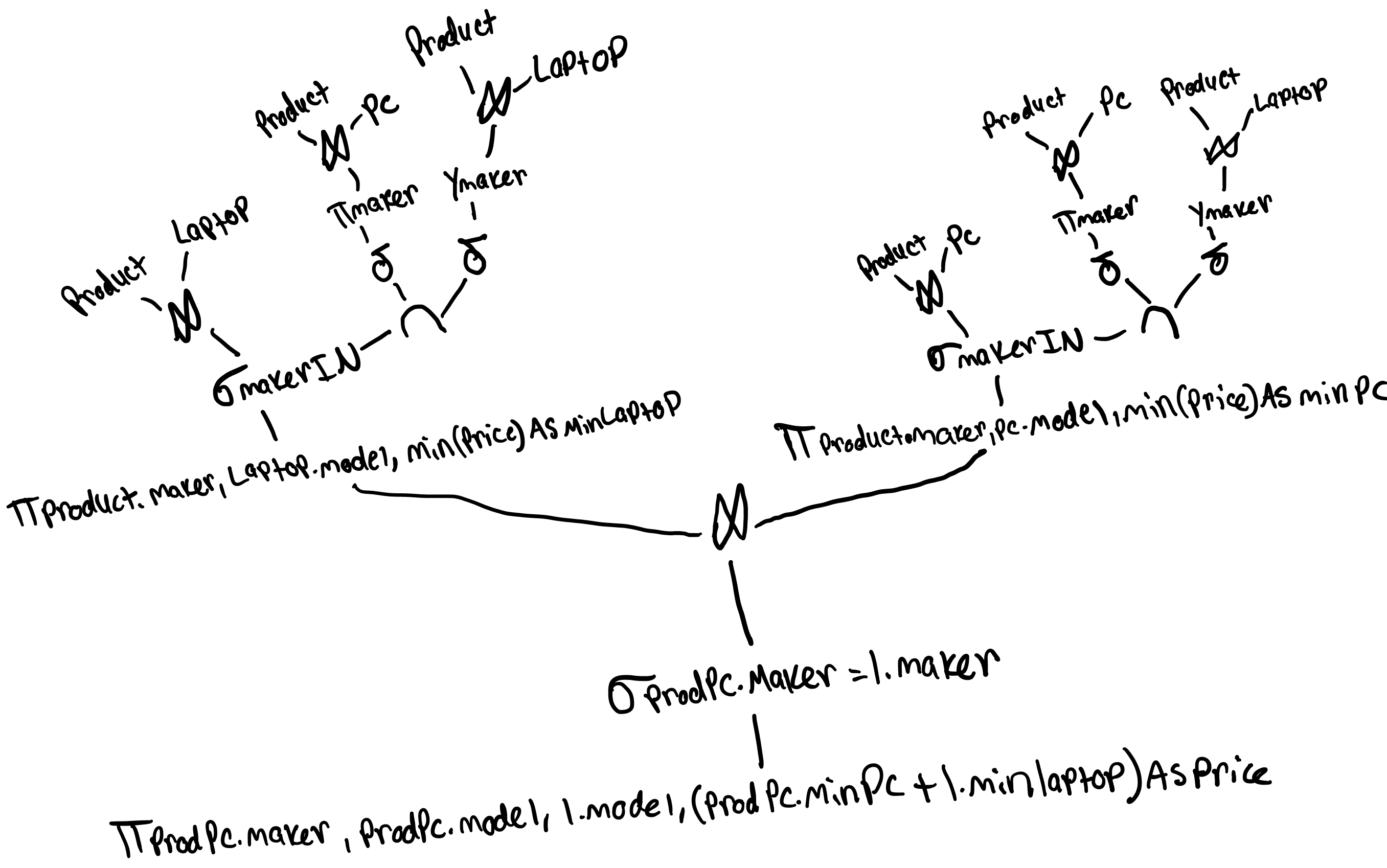
Wednesday, October 28, 2020

6:34 PM



Exam 5)

Wednesday, October 28, 2020 6:45 PM



# Exam 6)

Wednesday, October 28, 2020

6:50 PM

Printer  
|  
 $\Pi \text{AVG}(\text{price})$

# Exam 7)

Wednesday, October 28, 2020

6:51 PM

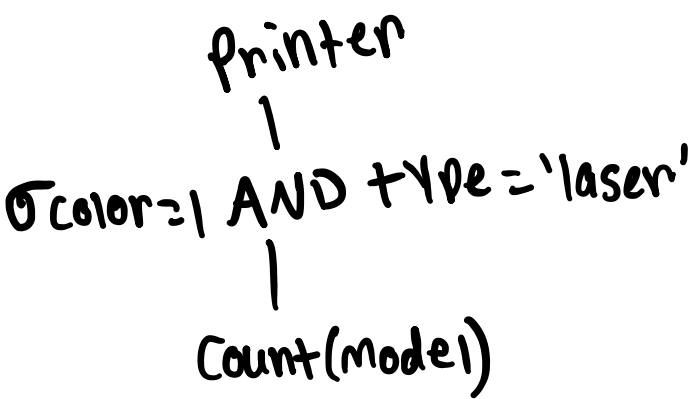
Printer

1

Y+type, count(model) as Cnt

# Exam 8)

Wednesday, October 28, 2020 6:56 PM

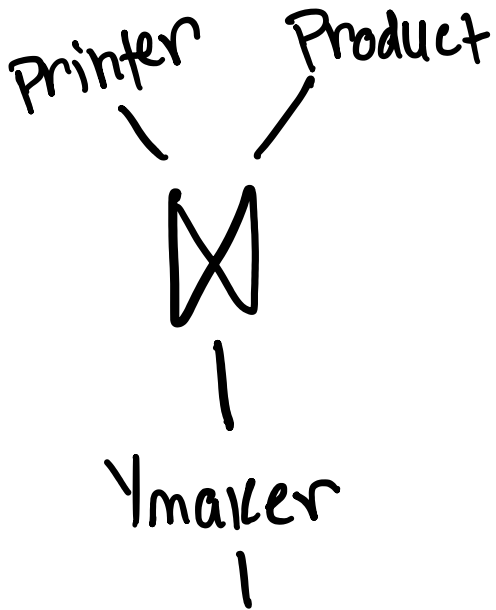




## Exam 9)

Wednesday, October 28, 2020

7:02 PM



$\text{count}(\text{printer.type}) \geq 2$

# Exam 10)

Wednesday, October 28, 2020

7:11 PM

Laptop  
|

Yscreen, maker, min(price) as minPrice

# Exam 11)

Wednesday, October 28, 2020

7:15 PM

Laptop

|

Yscreen

|

$\sigma_{\text{count}(\text{model})} \geq 3$

## Exam 12)

Wednesday, October 28, 2020

7:46 PM

Laptop

↓  
Yscreen

↓

$\sigma_{\text{count(speed)}} \geq 2$

# Exam 13)

Wednesday, October 28, 2020

7:48 PM

Laptop

|

PC

/

$$\sigma_{\text{Laptop.Price}} > \pi_{\text{max}}(\text{PC.Price})$$

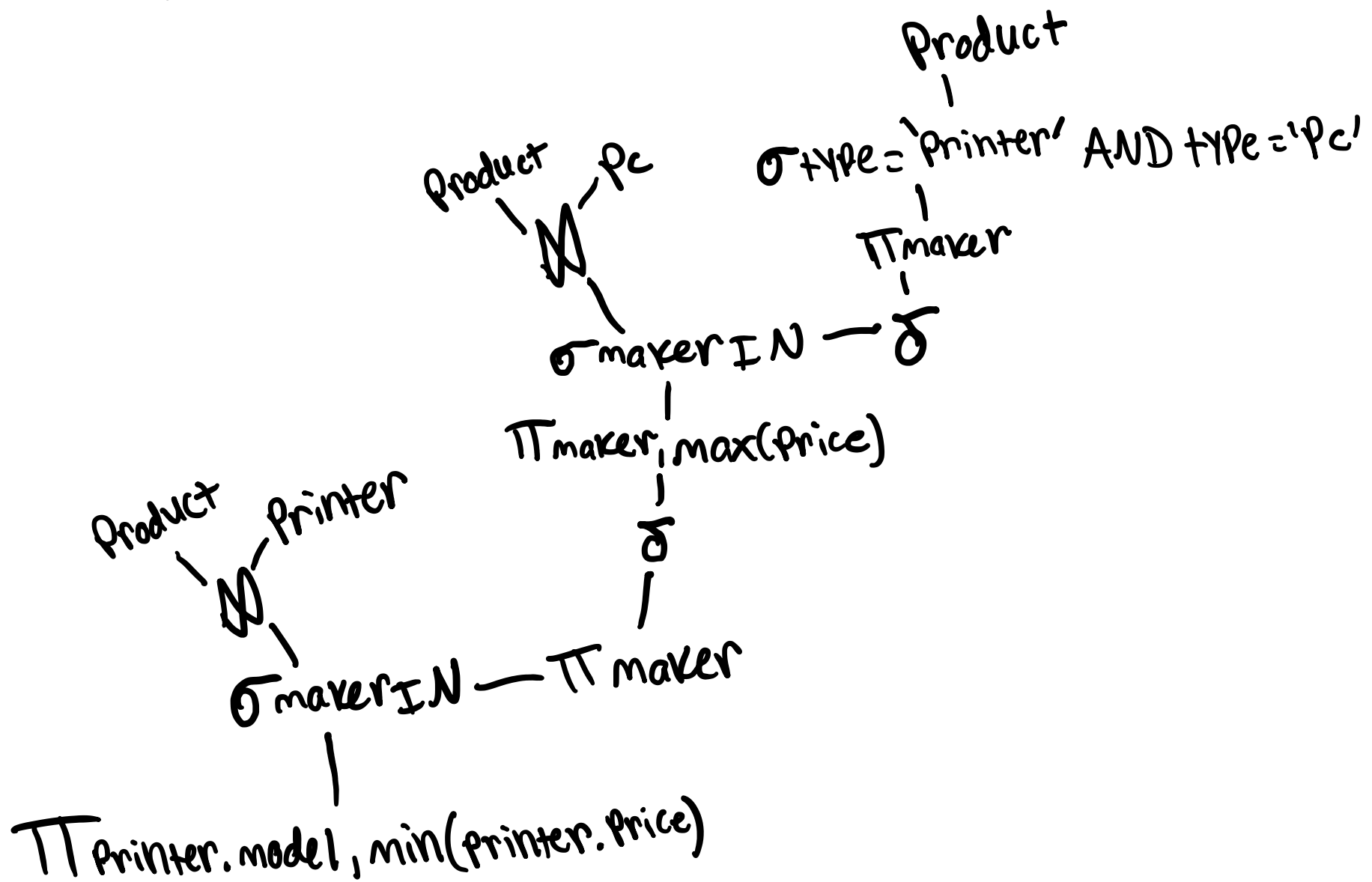
|

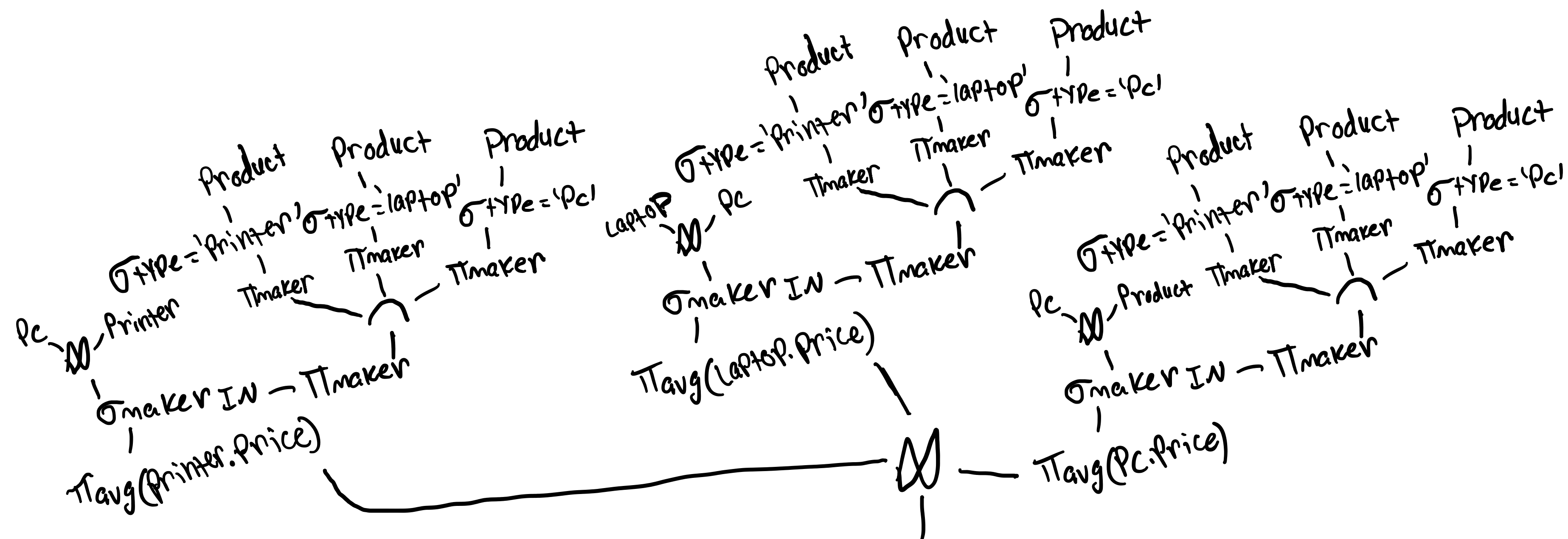
$\pi_{\text{model, Price}}$

# Exam 14)

Wednesday, October 28, 2020

7:50 PM



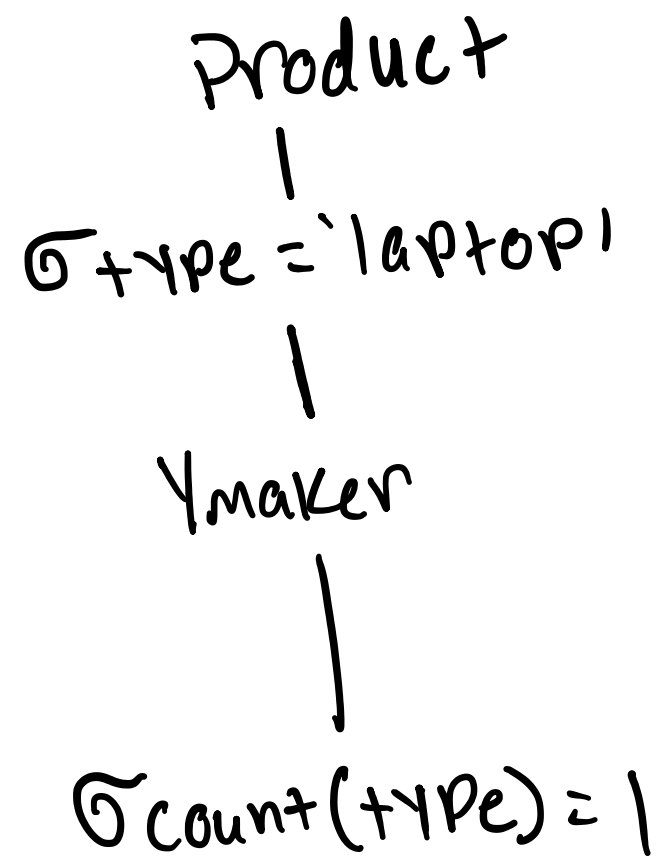


$\pi_{PcTbl.avgPc, laptopTbl.avgLaptop, printerTbl.avgPrinter}$

## Exam 16)

Wednesday, October 28, 2020

7:50 PM

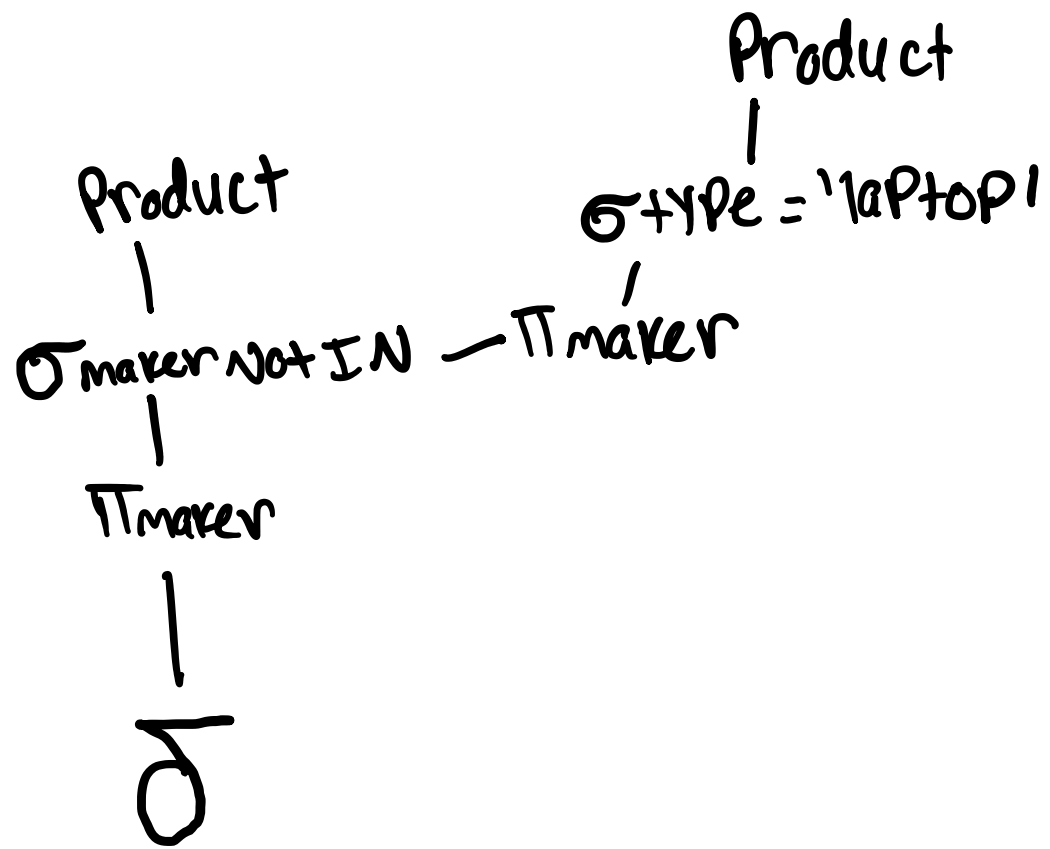




# Exam 17)

Wednesday, October 28, 2020

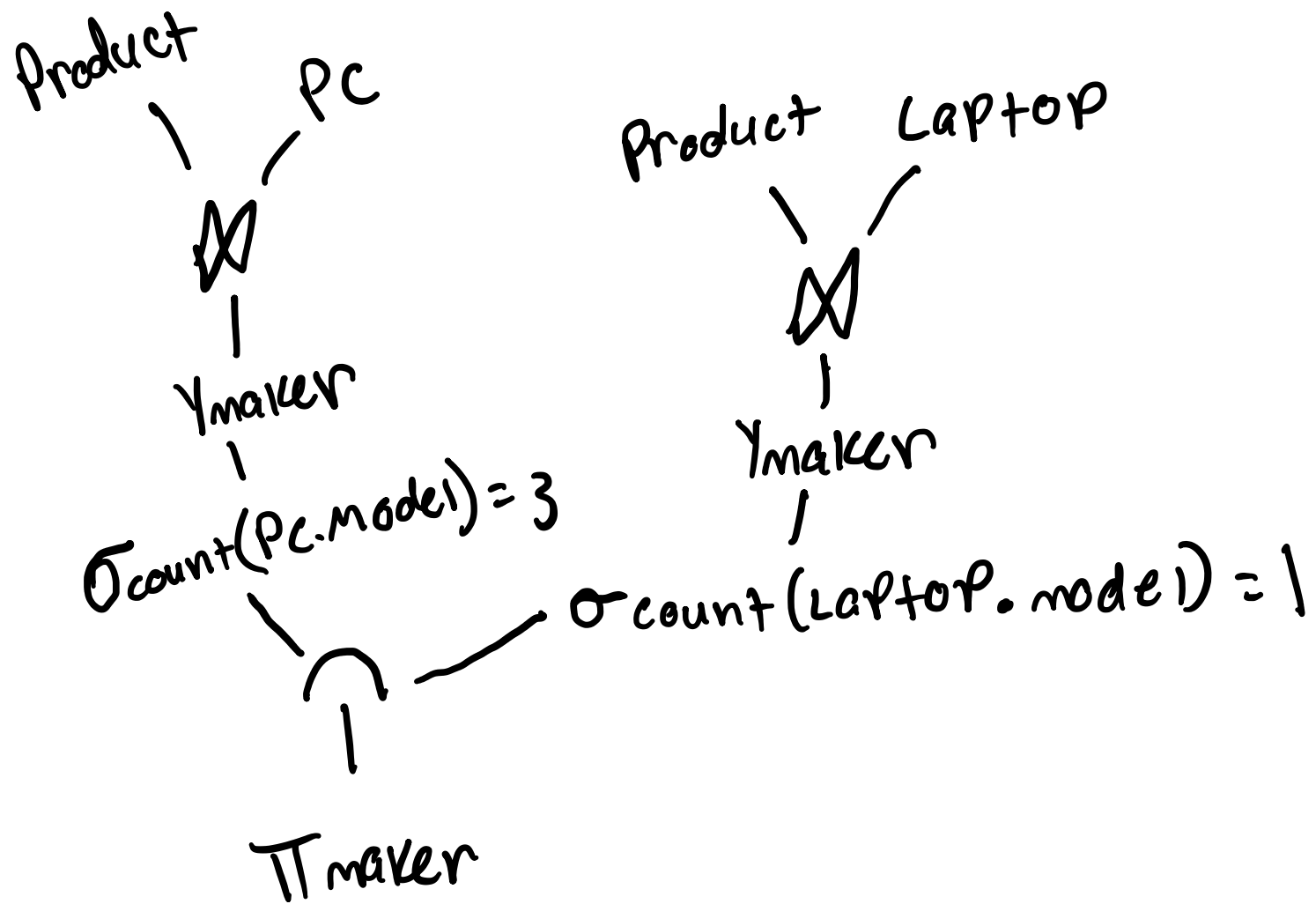
7:51 PM



# Exam 18)

Wednesday, October 28, 2020

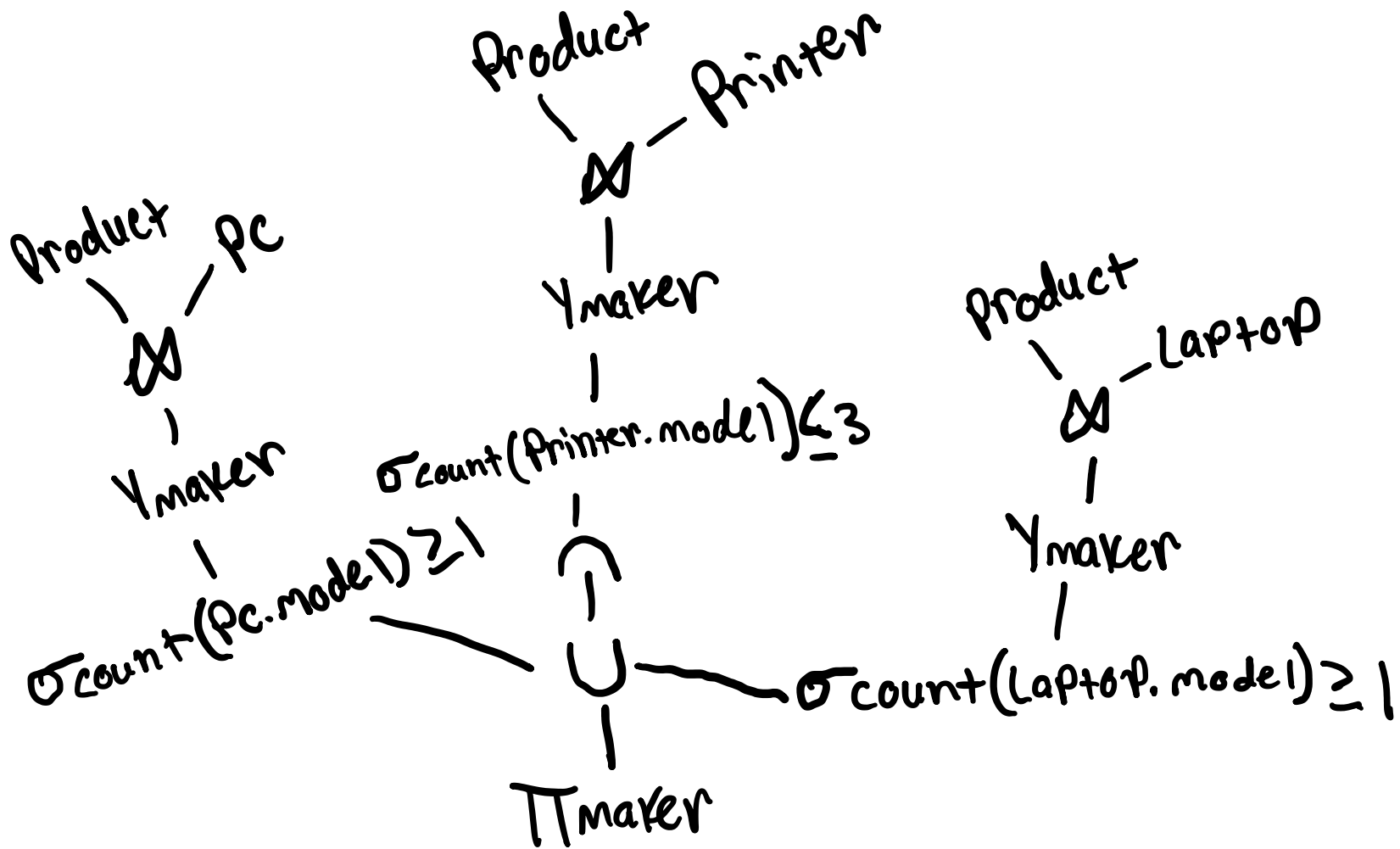
7:51 PM



# Exam 19)

Wednesday, October 28, 2020

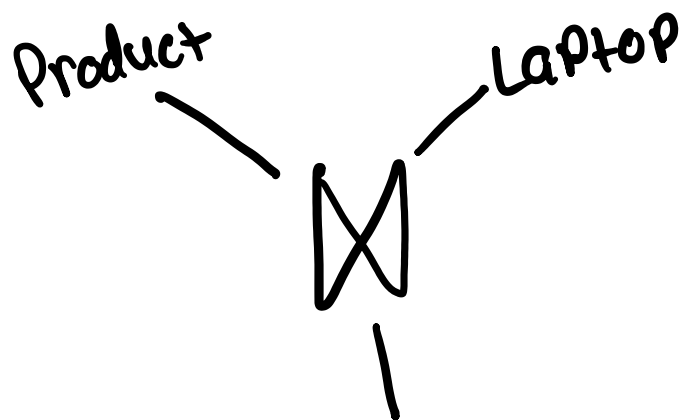
7:51 PM



# Exam 20)

Wednesday, October 28, 2020

7:51 PM



$\sigma_{\text{Laptop.model} = \text{Product.model}}$

$\text{AND Laptop.screen} \geq 15$

$\text{AND Laptop.speed} < 2$

$\text{AND maker IN } \text{---} \pi_{\text{maker}}$

$\sigma_{\text{type} = \text{'printer'}}$

$\pi_{\text{Product.maker, Laptop.model, Laptop.screen, Laptop.speed}}$