aanundj@uio.no

IN1020 - Gruppe 14

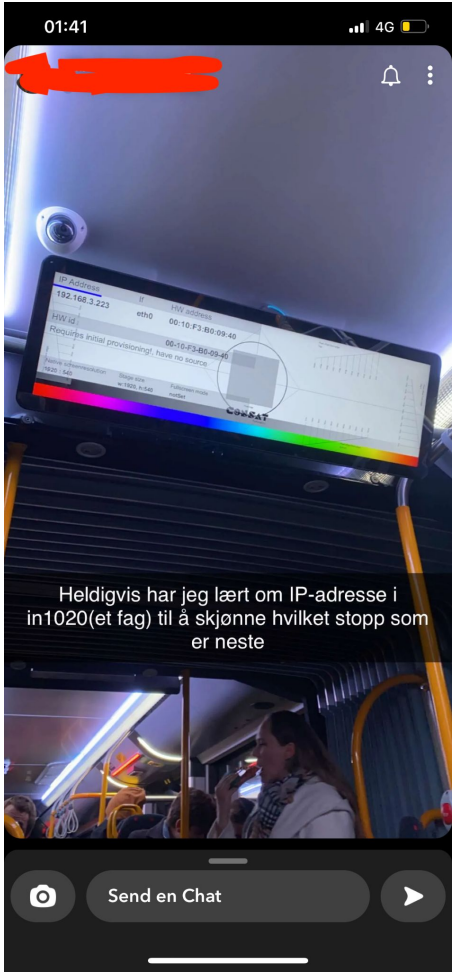
Dagens plan

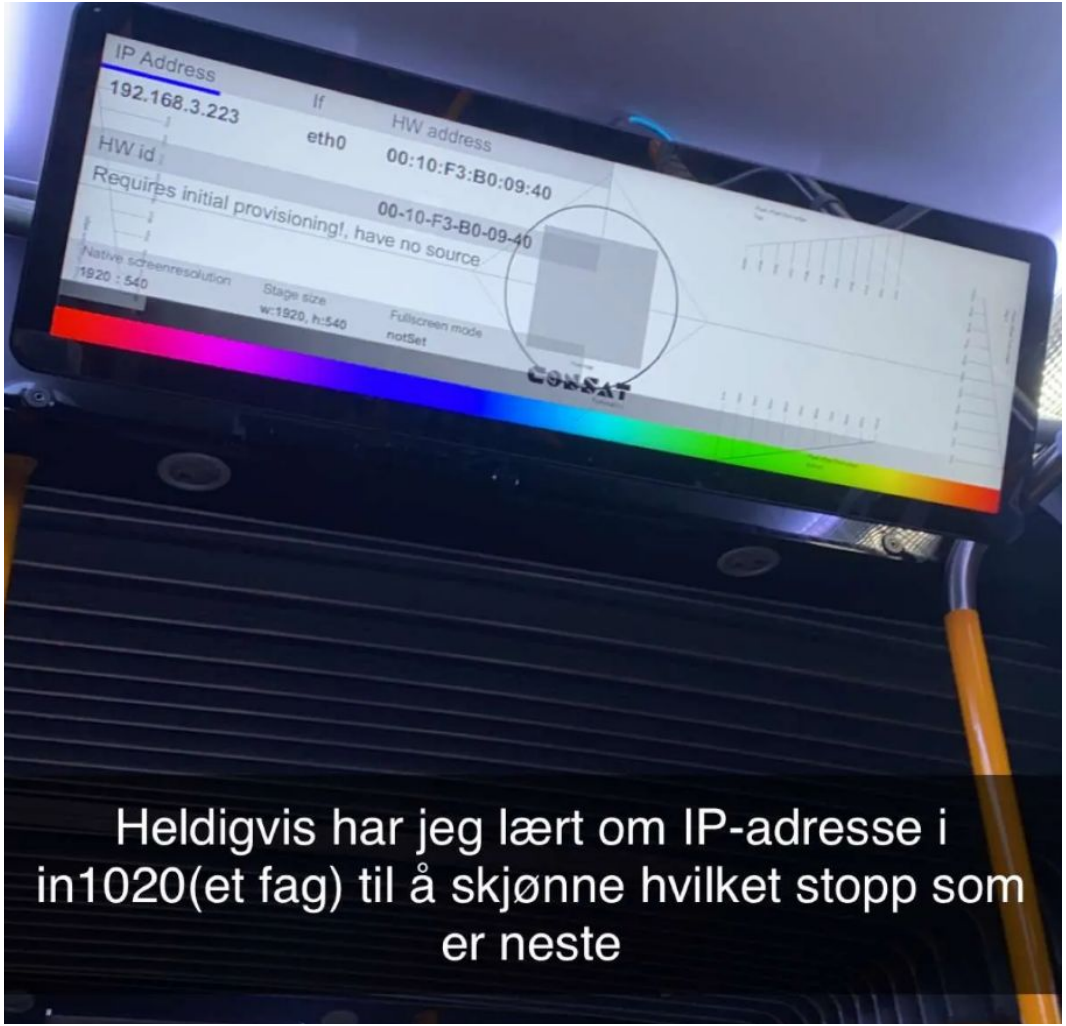
Første time:

- Gå gjennom de ulike portene
- Se på et par eksamensoppgaver

Andre time:

- Jobbe med ukesoppgaver
- Snakke om oblig

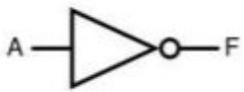

01:41
4G
Heldigvis har jeg lært om IP-adresse i in1020(et fag) til å skjønne hvilket stopp som er neste
Send en Chat


IP Address
192.168.3.223
If
eth0
HW address
00:10:F3:B0:09:40
HW id
00-10-F3-B0-09-40
Requires initial provisioning!, have no source
Native screenresolution
1920 : 540
Stage size
w:1920, h:540
Fullscreen mode
notSet
CONSAT
Heldigvis har jeg lært om IP-adresse i in1020(et fag) til å skjønne hvilket stopp som er neste

INV - port

$F = A'$

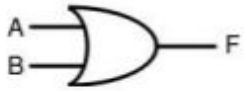
A	F
0	1
1	0



OR - port

$F = A+B$

A	B	F
0	0	0
0	1	1
1	0	1
1	1	1



AND - port

$F = AB$

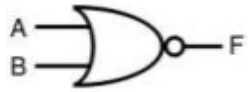
A	B	F
0	0	0
0	1	0
1	0	0
1	1	1



NOR - port

$F = (A + B)'$

A	B	F
0	0	1
0	1	0
1	0	0
1	1	0



NAND - port

$F = (AB)'$

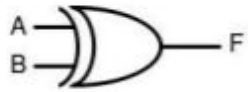
A	B	F
0	0	1
0	1	1
1	0	1
1	1	0



XOR - port

$F = A \oplus B$

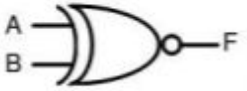
A	B	F
0	0	0
0	1	1
1	0	1
1	1	0



XNOR - port

$F = (A \oplus B)'$

A	B	F
0	0	1
0	1	0
1	0	0
1	1	1



Alle logiske port-typer

Sannhetsverditabell

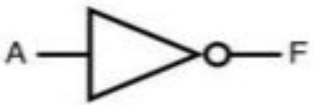
- En oversikt/beskrivelse av logisk funksjon for alle mulige inngangskombinasjoner.

- A (og B) = Input
- F = Output

INV - port

$F = A'$

A	F
0	1
1	0



- Apostrofe på slutten = Negativ = x´

Sannhetsverditabell

- OR - port = Minst én må være sann
- NOR - port = Begge må være usanne
- Bruker +

OR - port

$F = A+B$

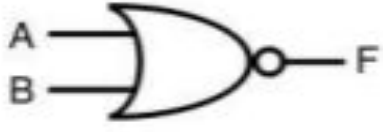
A	B	F
0	0	0
0	1	1
1	0	1
1	1	1



NOR - port

$F = (A + B)'$

A	B	F
0	0	1
0	1	0
1	0	0
1	1	0



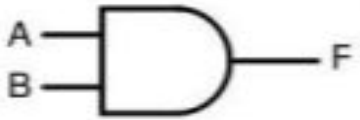
Sannhetsverditabell

- AND - port = Begge **må** være sanne samtidig
- NAND - port = Begge kan **ikke** være sanne samtidig
- Bruker *

AND - port

$F = AB$

A	B	F
0	0	0
0	1	0
1	0	0
1	1	1



NAND - port

$F = (AB)'$

A	B	F
0	0	1
0	1	1
1	0	1
1	1	0



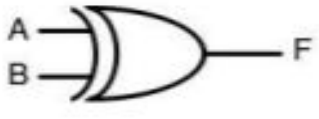
Sannhetsverditabell

- XOR - port = **Må** ha ulike verdier
- XNOR - port = **Må** ha like verdier

XOR - port

$F = A \oplus B$

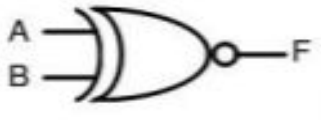
A	B	F
0	0	0
0	1	1
1	0	1
1	1	0



XNOR - port

$F = (A \oplus B)'$

A	B	F
0	0	1
0	1	0
1	0	0
1	1	1



Hva er en krets?

- En krets er en sammenheng av elektriske komponenter

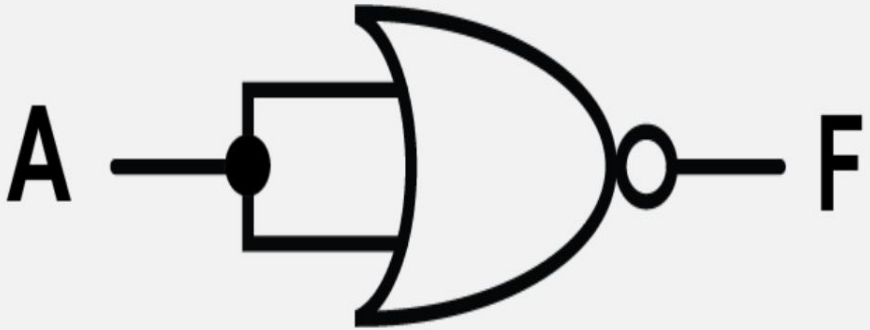
I dette kurset:

- Flere porter sammen

Eksamensoppgavene

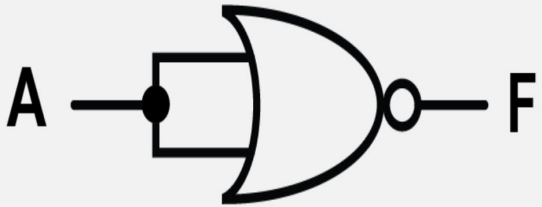
- [ ] F = 1
- [ ] F = 0
- [ ] F = A+B
- [ ] F = AB´
- [ ] F = A´
- [ ] F = AA´
- [ ] F = (A+A)´
- [ ] F = AA

4.1 Portanalyse



Hva er funksjonsuttrykket til porten over? (Det kan være flere riktige svar.)

4.1 **Portanalyse**

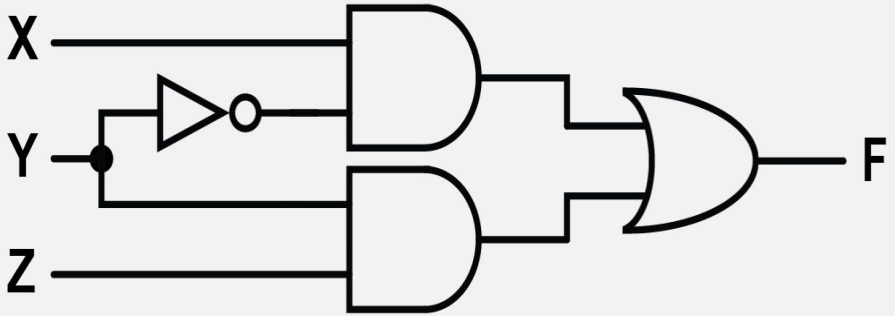


- [ ] F = 1
- [ ] F = 0
- [ ] F = A+B
- [ ] F = AB´
- [ ] F = A´ ✔
- [ ] F = AA´
- [ ] F = (A+A)´ ✔
- [ ] F = AA

Eksamensoppgavene

- [ ] F = x + y + z
- [ ] F = xyz
- [ ] F = x´+ y + z´
- [ ] F = x´ + z´
- [ ] F = xy + yz
- [ ] F = xz + y´
- [ ] F = xy´ + zy
- [ ] F = xy´ + yz

4.2 **Kretsanalyse**

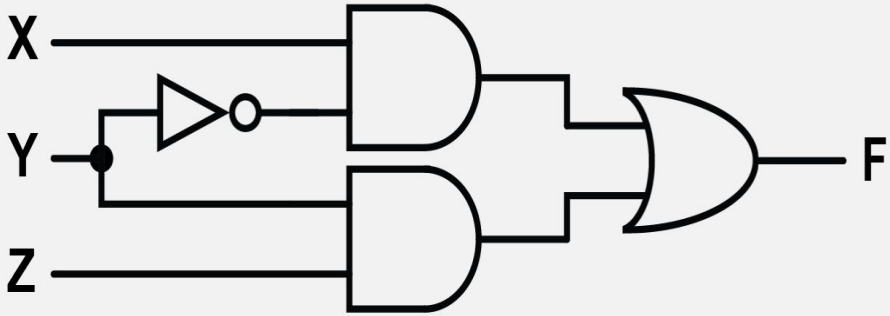


Hva er funksjonsuttrykket for kretsen over?

Eksamensoppgavene

- [ ] F = x + y + z
- [ ] F = xyz
- [ ] F = x´+ y + z´
- [ ] F = x´ + z´
- [ ] F = xy + yz
- [ ] F = xz + y´
- [ ] F = xy´ + zy
- [ ] F = xy´ + yz

4.2 **Kretsanalyse**



Hva er funksjonsuttrykket for kretsen over?

Jobbe med ukesoppgaver eller oblig

Ukens filmtips

- En av mine favoritter
- Veldig bra
- Fint soundtrack

