

Koble mot database

Hente ut data fra tabell (både TUI og GUI)

Legge data inn i tabell (både TUI og GUI)

USE heltnydatabase;

SELECT *

FROM Vare;

CREATE USER 'Lagersjefen2022' IDENTIFIED BY 'lagerpw';

GRANT SELECT ON Vare TO 'Lagersjefen2022';

The screenshot displays the MySQL Workbench interface. The top pane shows a SQL script with the following commands:

```
1 USE heltnydatabase;
2
3 SELECT *
4 FROM Vare;
5
6 CREATE USER 'Lagersjefen2022' IDENTIFIED BY 'lagerpw';
7
8 GRANT SELECT ON Vare TO 'Lagersjefen2022';
9
```

The bottom pane shows the execution results. The first three commands (1-3) are successful. The fourth command (4) results in an error: "ERROR 1044 (42000): Granting SELECT on database 'heltny' to user 'Lagersjefen2022'@'localhost' is denied because it does not have the GRANT OPTION." The fifth command (5) is also successful. The sixth command (6) results in an error: "ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'Lagersjefen2022' at line 6." The seventh command (7) is successful. The eighth command (8) results in an error: "ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'Lagersjefen2022' at line 8." The ninth command (9) is successful.

Id	Msg	Type	Text	Err No	Msg No	Source
1	USE heltnydatabase;	Success				
2		Success				
3	SELECT *	Success				
4	FROM Vare;	Error	Granting SELECT on database 'heltny' to user 'Lagersjefen2022'@'localhost' is denied because it does not have the GRANT OPTION.	1044	42000	MySQL
5		Success				
6	CREATE USER 'Lagersjefen2022' IDENTIFIED BY 'lagerpw';	Error	You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'Lagersjefen2022' at line 6.	1064	42000	MySQL
7		Success				
8	GRANT SELECT ON Vare TO 'Lagersjefen2022';	Error	You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'Lagersjefen2022' at line 8.	1064	42000	MySQL
9		Success				

```
1. #PRG1100-2022-kobling og bruk av cursor
2
3 import mysql.connector
4
5 #1. kobler mot databasen
6 mindatabase=mysql.connector.connect(host='localhost', port=3306,
7 user='Dagersjefen2022', passwd='lagerpw', db='heltnydatabase')
8
9 #2. oppretter cursoren/markøren
10 markor=mysql.connector.cursor()
11
12 #3. bruke databasen
13 markor.execute("SELECT * FROM Vare")
14
15 #4. bruke resultatet
16 for row in markor:
17     print(row)
18
19 #5. koble ned databasen, cursoren stenges etter bruk, koblingen stenges ved
20 programslutt
21 markor.close()
22 mindatabase.close()
```

```

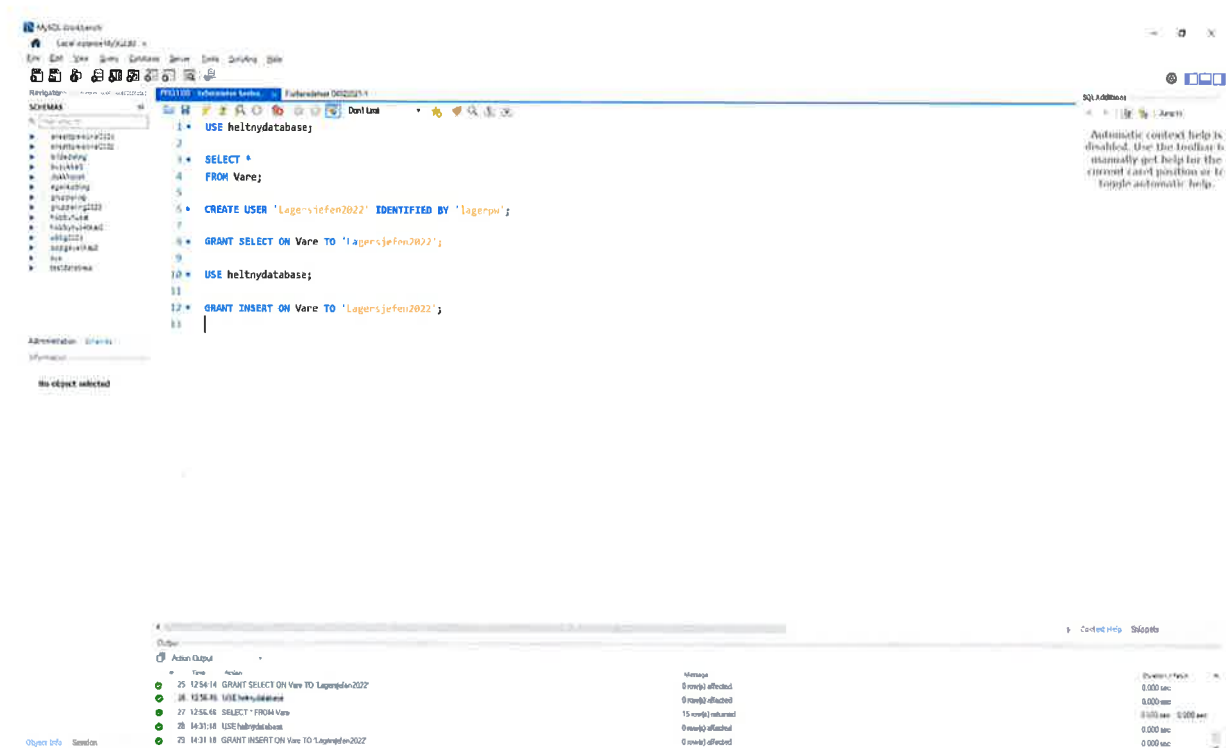
1  #PRG1100-2022-listeboks m scrollbar mot db
2
3  import mysql.connector
4  from tkinter import *
5
6  def hent_prisoglager(event):
7      valgt=lst_varer.get(lst_varer.curselection())
8
9      prisoglager_markor=mindatabase.cursor()
10     prisoglager_markor.execute('SELECT Betegnelse, Pris, Antall FROM Vare')
11
12     #Finner riktig pris og varebeholdning,
13     #forutsetter at Betegnelse er unik,
14     #Bruker her for-løkke for gjennomgang av rader i prisoglager_markor,
15     #ville vært mere naturlig med en while-løkke struktur, leser nå alle rader
    hver gang
16     for row in prisoglager_markor:
17         if valgt==row[0]:
18             pris.set(row[1])
19             lager.set(row[2])
20     prisoglager_markor.close()
21
22     #1. kobler mot databasen
23     mindatabase=mysql.connector.connect(host='localhost', port=3306,
24     user='Lagersjefen2022', passwd='lagerpw', db='heltnydatabase')
25
26     #2. oppretter cursor/markør
27     vare_markor=mindatabase.cursor()
28
29     #3. bruke databasen
30     vare_markor.execute('SELECT * FROM Vare')
31
32     #4. bruke resultatet
33     #Oppretter en liste basert på Betegnelse/varenavn fra varetabellen
34     varer=[]
35     for row in vare_markor:
36         varer +=[row[1]]
37
38     window=Tk()
39     window.title("Varer")
40     y_scroll=Scrollbar(window, orient=VERTICAL)
41     y_scroll.grid(row=0, column=2, rowspan=10, padx=(0,100), pady=5, sticky=NS)
42
43     innhold_i_lst_varer=StringVar()
44     lst_varer=Listbox(window, width=50, height=10,
45     listvariable=innhold_i_lst_varer, yscrollcommand=y_scroll.set)
46     lst_varer.grid(row=0, column=1, rowspan=10, padx=(100,0), pady=5, sticky=E)
47     innhold_i_lst_varer.set(tuple(varer))
48     y_scroll["command"]=lst_varer.yview
49
50     lbl_pris=Label(window, text='Prisen er:')
51     lbl_pris.grid(row=0, column=3, padx=5, pady=5, sticky=E)
52     lbl_lager=Label(window, text='Lagerstatusen er:')
53     lbl_lager.grid(row=1, column=3, padx=5, pady=5, sticky=E)
54
55     pris=StringVar()
56     ent_pris=Entry(window, width=10, state="readonly", textvariable=pris)
57     ent_pris.grid(row=0, column=4, padx=5, pady=5, sticky=W)
58     lager=StringVar()
59     ent_lager=Entry(window, width=10, state="readonly", textvariable=lager)
60     ent_lager.grid(row=1, column=4, padx=5, pady=5, sticky=W)
61
62     lst_varer.bind("<<ListboxSelect>>", hent_prisoglager)
63
64     window.mainloop()
65
66     #5. koble ned databasen
67     vare_markor.close()
68     mindatabase.close()

```

Lagersjefen2022 må få rettigheter til å sette inn data i tabellen. Brukeren er opprettet tidligere, nå gir vi vedkommende utvidede rettigheter.

USE heltnydatabase;

GRANT INSERT ON Vare TO 'Lagersjefen2022';



```

1  #PRG1100-2022-innsetting TUI og data i cursor
2
3  #Innsetting av data i database fra Python
4  #Innsetting ved verdiene "rett i cursoren"
5
6  import mysql.connector
7
8  #1. kobler mot databasen
9  mindatabase=mysql.connector.connect(host='localhost', port=3306,
10 user='Lagersjefen2022', passwd='lagerpw', db='heltnydatabase')
11
12 #2. oppretter cursoren/markøren
13 settinn_markor=mindatabase.cursor()
14 markor=mindatabase.cursor()
15
16 #3. bruke databasen
17 settinn_markor.execute("INSERT INTO Vare"
18                          "(VNr, Betegnelse, Pris, KatNr, Antall, Hylle)"
19                          "VALUES('9999', 'Testvare', 99.99, 999, 99, 'T99')")
20 mindatabase.commit()
21 settinn_markor.execute("INSERT INTO Vare"
22                          "(VNr, Betegnelse, Pris, KatNr, Antall, Hylle)"
23                          "VALUES('8888', 'Endaentestvare', 88.88, 888, 88,
24                          'T88')")
25 mindatabase.commit()
26
27 markor.execute('SELECT * FROM Vare')
28
29 #4. bruke resultatet
30 for row in markor:
31     print(row)
32
33 #5. koble ned databasen
34 settinn_markor.close()
35 markor.close()
36 mindatabase.close()

```

```

1  #PRG1100-2022-innsetting TUI og variable m substitusjon
2
3  #Innsetting av data i database fra Python
4  #Innsetting ved verdiene inn i variable som referes i cursoren
5
6  import mysql.connector
7
8  #1. kobler mot databasen
9  mindatabase=mysql.connector.connect(host='localhost', port=3306,
10                                     user='Lagersjefen2022', passwd='lagerpw', db='heltnydatabase')
11
12 #2. oppretter cursoren/markøren
13 settinn_markor=mindatabase.cursor()
14 markor=mindatabase.cursor()
15
16 #3. bruke databasen
17 varenr=input('Oppgi varenr: ')
18 varenavn=input('Oppgi varenavn: ')
19 pris=float(input('Oppgi pris: '))
20 katnr=int(input('Oppgi kategorinr: '))
21 antall=int(input('Oppgi antall: '))
22 hylle=input('Oppgi hylleplassering: ')
23
24 settinn_markor.execute("INSERT INTO Vare"
25                        "(VNr, Betegnelse, Pris, KatNr, Antall, Hylle)"
26                        "VALUES('9999', 'Testvare', 99.99, 999, 99, 'T99')")
27 mindatabase.commit()
28 settinn_vare=("INSERT INTO Vare"
29              "(VNr, Betegnelse, Pris, KatNr, Antall, Hylle)"
30              "VALUES(%s, %s, %s, %s, %s, %s)")
31 datany_vare=(varenr, varenavn, pris, katnr, antall, hylle)
32
33 settinn_markor.execute(settinn_vare, datany_vare)
34 mindatabase.commit()
35
36 markor.execute('SELECT * FROM Vare')
37
38 #4. bruke resultatet
39 for row in markor:
40     print(row)
41
42 #5. koble ned databasen
43 settinn_markor.close()
44 markor.close()
45 mindatabase.close()
46

```

```

1  #Vindu ny vare forelesning 8 = 2022
2
3  #Vindu ny vare, forarbeid før forelesning 8
4
5  from tkinter import *
6  import mysql.connector
7
8  mindatabase=mysql.connector.connect(host='localhost', port=3306,
9  user='Lagersjefen2022', passwd='lagerpw', db='heltnydatabase')
10
11 window=Tk()
12 window.title("Nye Varer")
13
14 lbl_varenr=Label(window,text='Oppgi varenr: ')
15 lbl_varenr.grid(row=0, column=0, padx=5, pady=5, sticky=E)
16 lbl_varenavn=Label(window, text='Oppgi varenavn: ')
17 lbl_varenavn.grid(row=1, column=0, padx=5, pady=5, sticky=E)
18 lbl_pris=Label(window, text='Oppgi pris: ')
19 lbl_pris.grid(row=2, column=0, padx=5, pady=5, sticky=E)
20 lbl_katnr=Label(window, text='Oppgi kategorinr: ')
21 lbl_katnr.grid(row=3, column=0, padx=5, pady=5, sticky=E)
22 lbl_antall=Label(window, text='Oppgi antall: ')
23 lbl_antall.grid(row=4, column=0, padx=5, pady=5, sticky=E)
24 lbl_hylle=Label(window, text='Oppgi hylleplassering: ')
25 lbl_hylle.grid(row=5, column=0, padx=5, pady=5, sticky=E)
26
27 vnr=StringVar()
28 ent_vnr=Entry(window, width=6, textvariable=vnr)
29 ent_vnr.grid(row=0, column=1, padx=5, pady=5, sticky=W)
30 vnavn=StringVar()
31 ent_vnavn=Entry(window, width=20, textvariable=vnavn)
32 ent_vnavn.grid(row=1, column=1, padx=5, pady=5, sticky=W)
33 vpris=StringVar()
34 ent_vpris=Entry(window, width=5, textvariable=vpris)
35 ent_vpris.grid(row=2, column=1, padx=5, pady=5, sticky=W)
36 vkatnr=StringVar()
37 ent_vkatnr=Entry(window, width=4, textvariable=vkatnr)
38 ent_vkatnr.grid(row=3, column=1, padx=5, pady=5, sticky=W)
39 vantall=StringVar()
40 ent_vantall=Entry(window, width=4, textvariable=vantall)
41 ent_vantall.grid(row=4, column=1, padx=5, pady=5, sticky=W)
42 vhyllle=StringVar()
43 ent_vhyllle=Entry(window, width=4, textvariable=vhyllle)
44 ent_vhyllle.grid(row=5, column=1, padx=5, pady=5, sticky=W)
45
46 #Vi lager knapp for å lagre ny vare
47 btn_lagre=Button(window, text='Lagre')
48 btn_lagre.grid(row=6, column=2, padx=5, pady=5, sticky=W)
49
50 window.mainloop()
51
52 mindatabase.close()

```