Database 2

Obligatorisk oppgave

Høst 2020

Gruppemedlemmer

Hans Kristian Markeseth 233569

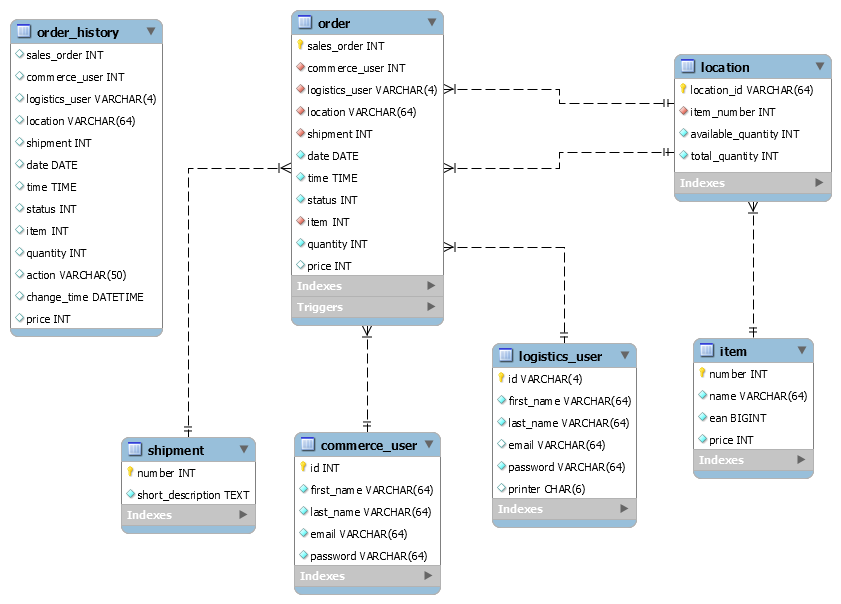
Christopher Tveråen 226526

Marthin Hauge 233619

Kort beskrivelse av Databasen

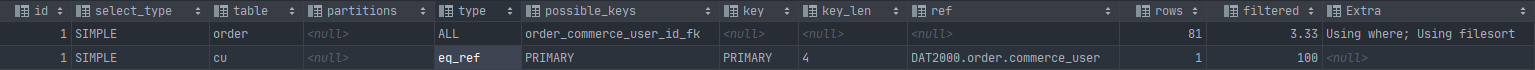
Vi har valgt å lage en database om noe vi alle har interesse for. Vi har hentet inspirasjon fra Komplett.no som er ledende innen datautstyr og ulike produkter. Vår database inneholder ulike produkter der vi har laget databasen vår som et lite lager.

ER Diagram



SQL spørringer mot databasen

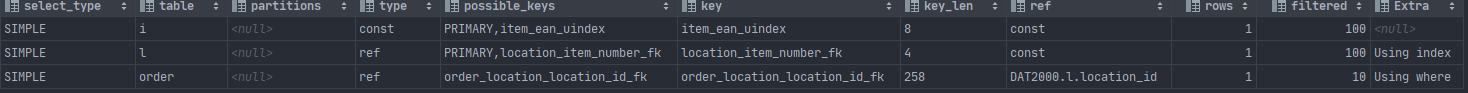
EXPLAIN SELECT `order`.sales\_order, CONCAT(cu.first\_name, ' ', cu.last\_name) AS 'Name', cu.email, `order`.price FROM `order` JOIN commerce\_user cu on `order`.commerce\_user = cu.id WHERE status = 0 AND `order`.date > 2020-01-1;



Som vi kan se her så har vi en spørring som er relativt lite effektiv da vi ikke har noen plan for å filtrere bort commerce\_user rader, siden vi ønsker å vise informasjon fra den kan det også være en mulighet for å begrense hvem vi ser. Denne spørringen har altså sett på 2 kolonner, status og dato. Den sjekker da tabellen for en dato som er i år eller over og at status må være 0, da fjerner den fort alle som har status lik en, og jobber derfra videre med å sjekke om ordren er laget etter 1.01.2020.

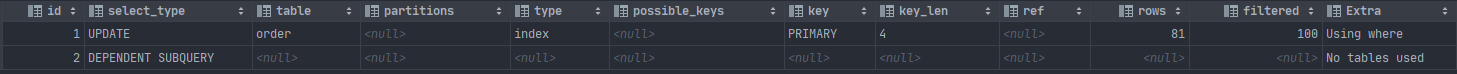
EXPLAIN SELECT location, name, number, ean FROM `order` JOIN location l on `order`.location = l.location\_id JOIN item i on l.item\_number = i.number WHERE ean = '1334437998431' AND status = 0;

I denne select setningen kan man se at vi kombinerer flere tabeller på hverandre for å få ut informasjonen som kreves for å hente varen, vi trenger navnet og nummer, samt lokasjonen og ean for å se at ean stemmer med varen som vi har hentet.



Som man kan se her henter vi ut data fra tre tabeller der vi henter ut to konstanter som betyr at det er kun en ordre som kan vises. Dette er en veldig effektiv spørring da vi henter ut verdiene på en slik måte at vi fjerner flest mulige muligheter.

EXPLAIN UPDATE `order` SET status = 1 WHERE sales\_order = (SELECT MAX(sales\_order));



Rask og liten update query da vi skal fullføre den siste ordren vi har fått inn, det gjøres med en dependent subquery som tilsier at vi henter ut sales\_order fra en SELECT spørring der vi da bruker funksjonen MAX som henter ut det høyeste tallet fra en kolonne. Dette gir oss da den nyeste ordren uten å sortere på dato som er tregere enn å søke på en statisk verdi.

EXPLAIN SELECT sales\_order, commerce\_user, logistics\_user, status, action, change\_time FROM order\_history WHERE action = 'UPDATE' AND change\_time < NOW();

Showing the updated orders until this point in time.



Grei query som viser ordre historikk, for å kunne begrense det litt mer og få en optimalisert query bruker vi også funksjonen now, så den ikke skal lete etter alle data, men kun data som er satt til før dagens dato.

På generell basis er det noen felles ting man kan gjøre for å optimalisere en database. For eksempel når man koder inn IF funksjoner så kan man bruke EXISTS, dette vil føre til en raskere og mer effektiv funksjon. Man kan også for mye større databaser bruke midlertidige tabeller som allerede er filtrert til å lage joins på. Dette er en effektiv løsning dersom man har databaser med flere millioner rader. Det er også en dårlig ide å bruke SELECT \* dette kan skape problemer videre inn i applikasjonens liv da flere kolonner som man ikke trenger blir lagt til og brukt under spørringer. Derfor er det viktig å alltid deklarere hvilke kolonner man har bruk for i spørringer. Man kan også minske eksekveringstid ved å ikke bruke underspørringer som har informasjon fra forelde spørringen. Dette kan forårsake en «row-by-row> spørring som ofte tar mye lenger tid siden den skal gå igjennom alt en rad av gangen for å hente den informasjonen du har spurt om å få ut. Sist er det å unngå bruken av loops, bruk heller mer avanserte spørringer, ved å bruke en loop låser du mange av ressursene til en spesifikk oppgave, som kan senke effektiviteten til de andre spørringene som kommer inn mens man holder på å kjøre en loop.

Bygg database

create table commerce\_user

(

id int auto\_increment

primary key,

first\_name varchar(64) not null,

last\_name varchar(64) not null,

email varchar(64) not null,

password varchar(64) not null,

constraint comerce\_user\_email\_uindex

unique (email)

);

create table item

(

number int auto\_increment

primary key,

name varchar(64) not null,

ean bigint not null,

price int not null,

constraint item\_ean\_uindex

unique (ean)

);

create table location

(

location\_id varchar(64) not null

primary key,

item\_number int not null,

available\_quantity int not null,

total\_quantity int not null,

constraint location\_item\_number\_fk

foreign key (item\_number) references item (number)

);

create table logistics\_user

(

id varchar(4) not null

primary key,

first\_name varchar(64) not null,

last\_name varchar(64) not null,

email varchar(64) null,

password varchar(64) not null,

printer char(6) null,

constraint logistics\_user\_printer\_uindex

unique (printer)

);

create table order\_history

(

sales\_order int null,

commerce\_user int null,

logistics\_user varchar(4) null,

location varchar(64) null,

shipment int null,

date date null,

time time null,

status int null,

item int null,

quantity int null,

action varchar(50) null,

change\_time datetime null,

price int null

);

create table shipment

(

number int not null

primary key,

short\_description text not null

);

create table `order`

(

sales\_order int auto\_increment

primary key,

commerce\_user int not null,

logistics\_user varchar(4) not null,

location varchar(64) not null,

shipment int not null,

date date not null,

time time not null,

status int not null,

item int not null,

quantity int not null,

price int default 0 null,

constraint order\_commerce\_user\_id\_fk

foreign key (commerce\_user) references commerce\_user (id),

constraint order\_location\_item\_number\_fk

foreign key (item) references location (item\_number),

constraint order\_location\_location\_id\_fk

foreign key (location) references location (location\_id),

constraint order\_logistics\_user\_id\_fk

foreign key (logistics\_user) references logistics\_user (id),

constraint order\_shipment\_number\_fk

foreign key (shipment) references shipment (number)

);

Fyll database med test data

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Aleksander','Hansen','Aleksander.Hansen@inbox.com','NW5JQV21CX76ZSZUXDP15W00F0MKRFY9K6ZCSK2Q2QQYX762XQJCH0XJ1C1PFHZN');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Jonas','Johansen','Jonas.Johansen@yahoo.com','FLAUOGVR52VSMFIR83UJUCTXHTB75XZCM2X5ZESSD1CQY6R8MQYKRZWV63GIQIWK');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Markus','Olsen','Markus.Olsen@opera.com','A5VWDDVK44XR9JJIPG76DIBQ8WG2UT44N12G3L5ULA977E6AY4BKFNPJWOQ44M86');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Markus','Larsen','Markus.Larsen@aol.com','5VLKWFIEIR82DAOF8BIZZQLGX003DW44S0UH0ADX7F63POAG20FK4HYEONP4NC8V');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Marcus','Andersen','Marcus.Andersen@yandex.com','0MOZBQFQ5DBWUHE4AWWKTJBGTV8K3C4TBC16RVMX84NQDRXHB4E6XAMZOXYAQ0DF');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Teo','Pedersen','Teo.Pedersen@yahoo.com','3KNUNZKRTF24SVYO5SDECM7WF9YRHO2K2QZYMROEAAK6YKGK79JV3047TQJXVJVK');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Herman','Nilsen','Herman.Nilsen@hotmail.com','5K6SX8ACYG1FFYCPCK63LAIQ1V6MJKAFZFMA9VG3F27CE5L8GU4HVXRI7FPG9N9H');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Hermann','Kristiansen','Hermann.Kristiansen@outlook.com','STRM9O9ZECO0W3OHS4ZGKHJF2HPPGOZIW7NHMXFJ28ADKSJIK035BSTX83J16HP5');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Mikkel','Jensen','Mikkel.Jensen@me.com','AUCZCAP0M7Y0HRD1OR9DEPE952W9OPP3ZT1USEZ7Z07ZOMKFNTZ8PNPPP5G0W7T2');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Ulrik','Karlsen','Ulrik.Karlsen@outlook.com','UZ0EAHTB0FCM77Y43LX53OSVXEGZEWUYZWIWQHU2T0K7R9ZZX7V1X3Z8992B6EYX');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Adrian','Johnsen','Adrian.Johnsen@inbox.com','M3S86DTQGQGJ0SPGWD810BC3QCK8W3GEAC1JWXYCDHDS01FPUUV7BY1TCZY6ZGRS');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Ludvig','Pettersen','Ludvig.Pettersen@aol.com','P25XML3J5TWALHJ1PL6BOFUVFMYY4U5UOPHIAAVUORRQEJPYP19IU5KMEDX0UWEN');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Ludvik','Eriksen','Ludvik.Eriksen@me.com','7G71QEISZKEKDAB1FJEO1ZCGY7WDL1NLWVZX1HD5PFP7ZJHAA4EWZDADZFHLYWIP');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Leon','Berg','Leon.Berg@outlook.com','EULY894EA7ZQB4FVB6GGS29DUT75PLXO8P8A8FBSQBRXDB5XV0DG8ZAD8B6C39Y3');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Adam','Haugen','Adam.Haugen@yahoo.com','FA64FQ1ZBR6Z2WOXXDCHS7ZK4YWWBPLCMV292CLE1SYWHIBY0PPKF51ENCBLAP1V');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Even','Hagen','Even.Hagen@hotmail.com','219COA1WQP91PS0XV5ZOZ0XLN5AJ4ELZDW49QEX81DMZEQVFQA5711K1KE3HPP81');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Sebastian','Johannessen','Sebastian.Johannessen@hotmail.no','C4E0JA78U5IZ8CW6GABJ1XXE8D4ECL3OJZEG28JTXAIGWBHKU54K6TDMEWPJKU8C');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Daniel','Andreassen','Daniel.Andreassen@foxmail.com','WC3VHVW14H30JKDK5C6XSGE85DEH4YT6JXV2XPDG5D0RPK1BNF88PFILVX8MKV4W');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Felix','Jacobsen','Felix.Jacobsen@opera.com','2KYH0G5BZ1YW6R7K2Q57JKC9FZS5FNPF97FKRC0100PUI8QPKBQX03X6N1WBNGTK');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Johan','Dahl','Johan.Dahl@aol.com','A0ZNBKWMRXKEMUJVQQO5G168WWFB1GBAPPN4YIHMPRKSZHF1EI7TA4EALZU4ESS3');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Johan','Jørgensen','Johan.Jørgensen@online.com','K1CD2TU6P21DRYSVS16JU57E7TGQCMPWVW3HWG9LVPCB8PTTEXCPPL2KJEX79JEB');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Johann','Henriksen','Johann.Henriksen@inbox.com','0CG1HF6VGNQI7TFCREY53UZS7OU4WZSXMKMVWY7BWZGVA9XTO19OIGYEBWI8CB31');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Iver','Lund','Iver.Lund@mozilla.com','X0FYHC2A3ZCLAMXRLT1UNSJE3PPB99GCWCPY0ZTJ2S5WQ205RCQQAX7R0XUFKGR4');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Alfred','Halvorsen','Alfred.Halvorsen@yandex.com','2L9FLJ66OGE6LPQJT0Q90G41B1XZ3E8JZE2AB3I8SQE0GW9C1OUGEDIOXE8YKNER');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Kristian','Sørensen','Kristian.Sørensen@aol.com','937QMREXXKSYM7TM3D4IW77PEV3O5Z3KQEJECPC5KZ7SD91YP3L14RXWA0HKFQ9U');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Kristian','Jakobsen','Kristian.Jakobsen@hotmail.com','IPGL1EGZ5NMAVCH5IRF83NX7PROTOA3R3Z8JK74E89YYH8XSYV8ZSL0IBDVFB4HS');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Christian','Moen','Christian.Moen@online.com','A9T3HD3XHFTVOV6I8AGRP0YGFWYXQGK54PDWL276Q9V1M3UYQWVHWU1Q9TYPZ1C1');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Leo','Gundersen','Leo.Gundersen@me.com','B4LT5TSDXSASR6SK54L77TR9Y6WO68LJIUOCTWYVCZM3935Z2NA5UQVHI0XBLGMX');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Martin','Iversen','Martin.Iversen@hotmail.no','4B6DRZNXSNEDUPFSWYKOCZHO24OWZED5EEQ6NDZVG858Q74EW9EFJQ22KKYMZGRF');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Victor','Strand','Victor.Strand@me.com','A51JJQH2YU4G86TJBJRZDP5SH6VQ34KK1DYZ3EEIWKFRW2QABRU4GGVQQ1LTMR91');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Victor','Solberg','Victor.Solberg@hotmail.no','VGFYDS8DGHE4RRUHT71BG2CPJQ23454C73Y9HPR9PGY3E7TILVLLCFZTBAYL4HBX');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Viktor','Svendsen','Viktor.Svendsen@foxmail.com','FUQPXRYSXB52TJU3IECJKHG2PI8SWXFOWPDPJ0RQRQW2REVU2H0WBVP8YMHS5ZJF');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Sigurd','Eide','Sigurd.Eide@mail.com','SWUMAQYYCCTWFMAYRM918AVN66A5DHFFEUXYL8RXN7ZJP2M80CJ4WXSJO4XFQERA');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Nikolai','Knutsen','Nikolai.Knutsen@hotmail.no','ILS3T9ROMROW35HSHK3EEL0V5GL8796HEL54IAXXX5JXT5UJ5VJCD3RJAXQ2TLF6');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Emma','Martinsen','Emma.Martinsen@me.com','AEXSIKP995XQAIFJTAV4Z6XR5QMRV19UNQTHVHFMZWPL9QQQFJSIN9JL33LYFNVL');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Nora','Paulsen','Nora.Paulsen@yandex.com','JJ964YJT9N44NRYG2481G947PORGOV1IQL5FFTFAGQBTQYI50X0DL31PCYTR1LOU');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Norah','Bakken','Norah.Bakken@hotmail.no','PX7T5BKUPHIF92GNCTMCKJMJRUHFZF598ZMF2DJ8AQ7AOTQEV93Q8EZAQAVSGYNK');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Sofie','Kristoffersen','Sofie.Kristoffersen@inbox.com','Q11ZVM7SPWUIP0BZGDFIH6AGEZ1G2S76V9LU20MCPRE1WF43SXP5GRD0Q4WF9S08');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Sophie','Mathisen','Sophie.Mathisen@me.com','LSNR9KDMOLLFPQRZ4M1JDU3E9XS51NILF1AJ325R0HE5DEQUHU3ZAF2YQADWO5IQ');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Ella','Lie','Ella.Lie@mail.com','YEBEBQXAQ7R44PK3Z0JE3A1Z91URKJUCXC93T6TOWNOHSDA5E2LQ0BJBQX4AWQXU');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Olivia','Amundsen','Olivia.Amundsen@mozilla.com','4FZO7A77BD769DY9M47UI57TJX439G4FXS2IEAR4A5YKAWS3EQ7PWC7G15330JCJ');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Ada','Nguyen','Ada.Nguyen@hotmail.no','UIU8G747UTS4EMU8W6NTPAKMEBHNMA3SVT0JRYVGFMX08R0P0QFCVJ68R8JUJNU1');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Sofia','Rasmussen','Sofia.Rasmussen@online.com','IE7FOZ58RUOQ689U1FRTE5CG63GSAI1HIU2L0XZC0KMC0NJAWJYV2CXS3LF2BVWM');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Sophia','Ali','Sophia.Ali@outlook.com','NJERUJOQRE3VFN3GM9EF72FB4NPJUTHW2HUQ84FI2GFF1QERU6EC4Q9NGJK839L7');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Sara','Lunde','Sara.Lunde@opera.com','FXESLZUNEUM09EJ2JFBPZDOJL8EJVCZ7TH4JZBX4394ICPTZHA7JQRTW7L31RJ82');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Sarah','Solheim','Sarah.Solheim@yandex.com','3V0J0L4W9RN776M2J766KB8MEILOUX8BN513GWJP5BSTS6ENVSQJNSAWADK9BT2Z');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Zara','Berge','Zara.Berge@inbox.com','IKKTZUZBUUSPVOIG8H18PLINDEUV04CEOLXU19UAU0BJ7JO25JD7KWS0MBGF2CUB');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Maja','Moe','Maja.Moe@email.com','TK5MYYPOJ6UPI4P89PNX9C0Q6S4QXKISQP33OOI5M7C4G4T0DGNY8IA226YXGMV3');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Maia','Nygård','Maia.Nygård@mail.com','YWXBUIAGMH01LKI4PWTXXJDHA11YSY209Z1EN10XSUD9ISHO2RG58EC23GWELZK9');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Maya','Bakke','Maya.Bakke@opera.com','WP2LA5PAFRI878DBC1SI2LYT2DZ1QXKNZTEXIX16NP0466TDKYGEOA0NJF5V49VX');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Leah','Kristensen','Leah.Kristensen@hotmail.no','GS6NMXC30AQJSX2WNQPID3VR9JD21Q38LMJD83FR69K7XQWOPR408GCA4J19NAOY');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Lea','Fredriksen','Lea.Fredriksen@email.com','R47LGO95MD2NVKQO0E2DRT8U28XMAL85W36RQ202SF5QJ02450HZ6PYU0ZOHIMJ6');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Hanna','Holm','Hanna.Holm@yahoo.com','5Z0YOLYSQBUVWQ0TYRIOQIWZJUDTP2GKBE67SUFKB3MCBLAW959NRPZ0PABXJ2MZ');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Hannah','Lien','Hannah.Lien@aol.com','3T2T2O4PG0CHUH1JGJ6QQK669J3H0Z300E259UVICPQ54ZUZ7G8HW2JXGGG3LZ5C');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Tiril','Hauge','Tiril.Hauge@online.com','0OROXVHXIMU94OVK3FABBDBBI0GTVXV6MV25LZ7ZYZ5AS3FE2Z36PBCG724WGEBB');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Tirill','Christensen','Tirill.Christensen@outlook.com','9TO92GQBUVVBUJ49SOO8SOANQ9SVJP2WYRDUH1AFUS8ALAOIUEG0EWQ2BPIC6SK6');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Emma','Andresen','Emma.Andresen@foxmail.com','NHDJF521RH28DZA6QYP8N4O4E7P6IJRFX72V2T6LVDXJM2F3H4OLU5BO51IBRSYS');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Nora','Nielsen','Nora.Nielsen@mozilla.com','0GKZ0P7C567S4ICHZFCVZ8GLC6D1Z0PX4L3F54FAD5OCD9IJDJY8J5DMKKHELPB6');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Norah','Knudsen','Norah.Knudsen@email.com','CVUOBJDYDLENQOBRW9MI1J9I4KO1WJDAXNKN69JM6N847A9FBQCFJ6XLCNYRGY8S');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Sofie','Evensen','Sofie.Evensen@foxmail.com','6LIVJBMJ4YJ4VGKVFOA3UWZNXUTS850652IIYH0G3CYK058FSKQPXJMB6U4T9G7U');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Sophie','Sæther','Sophie.Sæther@yandex.com','SZNJCOCUW4J2CRGCXVLHG6A07XZ2NJ3IQSGRJ637M521CT3OT9OXK3HUQPT12SQI');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Ella','Aas','Ella.Aas@inbox.com','2Q3E85CMXCLN7TUVAHVDTZLML9XDAJOZHT8KLLNLD6FGNLIBI4YC6XJA99ZGVNIA');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Olivia','Myhre','Olivia.Myhre@email.com','60F0SAQ2M8FR3UNEKY8IWN05XG400UMANDN7X7VTHNKN4864X38NO5VCMHEQVD9X');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Ada','Hanssen','Ada.Hanssen@me.com','3DPI4LK6WM3CAS7BL66UO0Z9MXIHRBF658PC4VOP025IQO7WSAVD71Q9F64SHXXB');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Sofia','Ahmed','Sofia.Ahmed@hotmail.no','QVKMGVN97ZHZO071P98OJ7FL8PIP83T3UPYDO8QRVGAL35Y5L24C33DOCH1BC55G');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Sophia','Haugland','Sophia.Haugland@foxmail.com','6TEIZFN7TY8PCXGURW8KFV1J3EX2TT165MWB6IP3TZUALNXDT5KVGZZKLW4LDVN7');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Sara','Thomassen','Sara.Thomassen@foxmail.com','F6HELP093SAVDMYJEULPHFJSLJ7XU2PWYCP36UTGPPALCABRI552EGFNOTRWM0LV');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Sarah','Sivertsen','Sarah.Sivertsen@mail.com','UZJU6IYG4OQ1MKE0E32DV365T3KXJGVN97HP67DXSDRL95DP3ZMUYRZ7QKVTV4IT');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Zara','Simonsen','Zara.Simonsen@yandex.com','BA3QGG4NXTTZ21FLN9OI5S4XEFJMKYMZQ8PRBTB2RAPHUS6NNTCB226VNH5H2KVU');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Maja','Danielsen','Maja.Danielsen@me.com','7N78K9XWE9UUJRV8VUIUKRRWYG6MGIQXWU0QO2DYYO9RIFUHWZO2K7P99KL5QBIH');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Maia','Berntsen','Maia.Berntsen@inbox.com','9FK5TDIMPV866J9BPYKQ0Q15UQ45B2H5IRHA16VOBNQV4N8993TSNYRVGTREZ6M5');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Maya','Sandvik','Maya.Sandvik@email.com','LVN4HZP9J3BM39LYP8Y4AG4M9QY1CWOCO7R5R3GY6Y8DUQ4UWPVY44090KQADFXC');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Leah','Rønning','Leah.Rønning@foxmail.com','Q71DZBP7HCWDYXADBN3I74SYCCV13ZV3MCO84AQV2UN72C0YDSLU2L721OB2GGT3');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Lea','Arnesen','Lea.Arnesen@email.com','F6P3T6X7Y08LR5NW5B0BHQ6JDTEI8R7PSPZEW0LFKFMZNEFMCAQF53XP10MO3CZK');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Hanna','Antonsen','Hanna.Antonsen@mail.com','6TABIEVQXSJVMDGOG7CL0J06KOOKE9IID77U1BAXI1PY4KLUOEA8I9CCTN4KEHUD');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Hannah','Næss','Hannah.Næss@mozilla.com','UBTVRDCPI6AIU6SX468O9RPBWL2GEP3HVQS87RDIGZKQMS31OC15Y766JJ35HIEK');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Ali','Vik','Ali.Vik@mail.com','6RT9O2PXXCVVOVA5MG6TWQY270XYM1CT16SMMADSYAOF7WWCLZDSWTRV6AGLUBRP');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Henrik','Haug','Henrik.Haug@hotmail.no','HRMSGVW8RKEUNAKIPN6GAU1DWTOWB15GNX15UDCSP3SU6Z9LXJKGKM7BFGVZJ3BE');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Ole','Ellingsen','Ole.Ellingsen@hotmail.com','WZWEVZ7KMDTBZO89T7070MMZ1PKJZCY35T3EMQ3DGFZGGLRSP6GADFCGXKEFER6X');

INSERT INTO commerce\_user (first\_name, last\_name, email, password) VALUES ('Hans','Thorsen','Hans.Thorsen@email.com','2JWLSFC0TB6JROO2KOTK08GARKIQ0DH5XK3J7X8RZ7LVB0JWHMLA0NPCPOAC2GEU');

INSERT INTO item (number ,name, ean, price) VALUES ('1','Samsung 65" QLED 4K Smart TV QE65Q74','3313475675996','10393');

INSERT INTO item (number ,name, ean, price) VALUES ('2','iiglo tynn fullt bevegelig TV veggfeste','9915323112265','11476');

INSERT INTO item (number ,name, ean, price) VALUES ('3','LG 43" 4K Smart TV 43UN7300','1134468238958','14806');

INSERT INTO item (number ,name, ean, price) VALUES ('4','Sony UBP-X800M2 4K Blu-ray spiller','2862628282633','7238');

INSERT INTO item (number ,name, ean, price) VALUES ('5','Apple Remote','8924554397731','4379');

INSERT INTO item (number ,name, ean, price) VALUES ('6','Finlux 32" LED TV','8697566411221','3975');

INSERT INTO item (number ,name, ean, price) VALUES ('7','Nvidia Shield TV','1334437998431','1658');

INSERT INTO item (number ,name, ean, price) VALUES ('8','Sony 32" LED Smart TV KDL32WE613','1691733126484','17959');

INSERT INTO item (number ,name, ean, price) VALUES ('9','Xiaomi Mi Box S','6889597811884','19729');

INSERT INTO item (number ,name, ean, price) VALUES ('10','Harman/Kardon Onyx Studio 5','6566724641633','18974');

INSERT INTO item (number ,name, ean, price) VALUES ('11','iiglo lydkabel miniJack 2m','4515574124542','11254');

INSERT INTO item (number ,name, ean, price) VALUES ('12','iiglo Strømkabel Schuko - C13 2 m','8164183231459','2194');

INSERT INTO item (number ,name, ean, price) VALUES ('13','Supra 2x1,6 høyttalerkabel 20m hvit','1958695846737','11482');

INSERT INTO item (number ,name, ean, price) VALUES ('14','Kabelholder KENSON Rib 50cm (3pk)','3728266298239','5174');

INSERT INTO item (number ,name, ean, price) VALUES ('15','Huawei P Smart Pro 128GB Breathing Crystal','8755981197171','3992');

INSERT INTO item (number ,name, ean, price) VALUES ('16','Samsung Galaxy S20 5G 128GB Grå','5617614132822','17203');

INSERT INTO item (number ,name, ean, price) VALUES ('17','Samsung Galaxy Note20 Ultra 5G 12GB+256GB Mystic Bronze','7845996535846','17073');

INSERT INTO item (number ,name, ean, price) VALUES ('18','OnePlus Nord 8+128GB Blue Marble','4957142539678','6805');

INSERT INTO item (number ,name, ean, price) VALUES ('19','Samsung Galaxy Xcover Pro 64 GB Sort','7294871535739','3026');

INSERT INTO item (number ,name, ean, price) VALUES ('20','Huawei Y6P 3+64GB Emerald Green','4987482156835','2850');

INSERT INTO item (number ,name, ean, price) VALUES ('21','iPhone 11 128 GB Sort','4675288624653','4886');

INSERT INTO item (number ,name, ean, price) VALUES ('22','iPhone SE 128GB Sort','5822143164873','16652');

INSERT INTO item (number ,name, ean, price) VALUES ('23','Jabra EVOLVE 75 Stereo UC','8524691635888','10833');

INSERT INTO item (number ,name, ean, price) VALUES ('24','Jabra Evolve 75e UC trådløst headset','7843634282278','13320');

INSERT INTO item (number ,name, ean, price) VALUES ('25','Logitech H110 PC Headset','5312442354174','9237');

INSERT INTO item (number ,name, ean, price) VALUES ('26','Jabra Speak 510 for Microsoft Lync','9249126673611','19776');

INSERT INTO item (number ,name, ean, price) VALUES ('27','Nintendo Switch','2271115226828','7489');

INSERT INTO item (number ,name, ean, price) VALUES ('28','Dell G5 5505 Special Edition 15,6" FHD 144 Hz','7755389464933','18241');

INSERT INTO item (number ,name, ean, price) VALUES ('29','Miele CM 5310 ObsidianSort kaffemaskin','4271164887256','19616');

INSERT INTO item (number ,name, ean, price) VALUES ('30','Ergonomisk kontorstol med høy rygg og nakkestøtte','6457258793898','6655');

INSERT INTO item (number ,name, ean, price) VALUES ('31','Apple Watch Series 5 GPS','2413314488272','8157');

INSERT INTO item (number ,name, ean, price) VALUES ('32','Xiaomi Roborock S5 Max robotstøvsuger','5347754689579','16418');

INSERT INTO item (number ,name, ean, price) VALUES ('33','Mill Panelovn med glassfront, hvit 900W, WIFI','8457678955877','13285');

INSERT INTO item (number ,name, ean, price) VALUES ('34','AVA Høytrykkspyler Master P70 X-Large Bundle','5868215655669','17086');

INSERT INTO item (number ,name, ean, price) VALUES ('35','Philips OneBlade Face + Body','3875587976425','15143');

INSERT INTO item (number ,name, ean, price) VALUES ('36','Oppblåsbar julenisse 180 cm','5642878195721','10579');

INSERT INTO item (number ,name, ean, price) VALUES ('37','LED Reinsdyr med slede','3795987379565','3783');

INSERT INTO item (number ,name, ean, price) VALUES ('38','iiglo Lommelykt 10 000 Lumen','6923355589334','13547');

INSERT INTO item (number ,name, ean, price) VALUES ('39','Oppladbart batteri, 4400mAh 18650 Li-ion','6969944826564','16088');

INSERT INTO item (number ,name, ean, price) VALUES ('40','Bosch SMV68MX05E oppvaskmaskin','8624648835774','10262');

INSERT INTO item (number ,name, ean, price) VALUES ('41','ASUS GeForce GTX 1660 SUPER DUAL EVO OC','7613333141762','3061');

INSERT INTO item (number ,name, ean, price) VALUES ('42','AMD Ryzen 9 5900X Prosessor','6444275275731','17986');

INSERT INTO item (number ,name, ean, price) VALUES ('43','Samsung 27" Curved Gamingskjerm','5414778519187','11084');

INSERT INTO item (number ,name, ean, price) VALUES ('44','Logitech MX Anywhere 3 Graphite','4467222843263','16817');

INSERT INTO item (number ,name, ean, price) VALUES ('45','Intel Core i9-10850K Prosessor Limited','8469238655597','10347');

INSERT INTO item (number ,name, ean, price) VALUES ('46','Svive Hydra Streaming Kit','8171442938375','18558');

INSERT INTO item (number ,name, ean, price) VALUES ('47','Ergonomisk hev/senk skrivebord E-Zee med motor - trefarget','4275247918318','8169');

INSERT INTO item (number ,name, ean, price) VALUES ('48','Flettet kabelstrømpe - 1m','4145948321664','9429');

INSERT INTO item (number ,name, ean, price) VALUES ('49','Ergonomisk knestol','6889785749139','9889');

INSERT INTO item (number ,name, ean, price) VALUES ('50','iiglo PC rengjøringskit','7195618736123','11203');

INSERT INTO item (number ,name, ean, price) VALUES ('51','iiglo oppgraderings-kit til PC','8131285483599','8746');

INSERT INTO item (number ,name, ean, price) VALUES ('52','KENSON ANNA kontorstol - sort','6947347857949','16519');

INSERT INTO item (number ,name, ean, price) VALUES ('53','NZXT Kraken X63 CPU Kjøler','6576617997364','19036');

INSERT INTO item (number ,name, ean, price) VALUES ('54','ASUS ROG Strix LC 360 CPU Kjøler','7835288478524','3204');

INSERT INTO item (number ,name, ean, price) VALUES ('55','Fractal Design Define 7 XL Big Tower Sort','5986527745658','8565');

INSERT INTO item (number ,name, ean, price) VALUES ('56','PC i deler - AMD Ryzen 7 3700X','7359846389883','15996');

INSERT INTO item (number ,name, ean, price) VALUES ('57','PC i deler - Pro Gamer RTX 2060','9744599958565','15054');

INSERT INTO item (number ,name, ean, price) VALUES ('58','Corsair Crystal 570X RGB Midi Tower Sort','2571939281658','17875');

INSERT INTO item (number ,name, ean, price) VALUES ('59','ASUS ROG Strix B460-F GAMING hovedkort','4115648822147','2896');

INSERT INTO item (number ,name, ean, price) VALUES ('60','Gigabyte B450 AORUS ELITE, Socket-AM4','9868239578761','10926');

INSERT INTO item (number ,name, ean, price) VALUES ('61','Corsair SF600 PSU, SFX','8486617541576','8804');

INSERT INTO item (number ,name, ean, price) VALUES ('62','Corsair Vengeance RGB PRO DDR4 2666MHz 16GB','6624864881885','9940');

INSERT INTO item (number ,name, ean, price) VALUES ('63','HyperX Fury RGB DDR4 2666MHz 32GB','1824417219348','17510');

INSERT INTO item (number ,name, ean, price) VALUES ('64','iiglo M610 Trådløs Ergo Mus Sort','2263991952676','9974');

INSERT INTO item (number ,name, ean, price) VALUES ('65','Razer Goliathus Speed Cosmic Musematte','6966152345635','16249');

INSERT INTO item (number ,name, ean, price) VALUES ('66','GUNNAR Optiks Carrying Case','7329982571378','17834');

INSERT INTO item (number ,name, ean, price) VALUES ('67','APC Overspenningsvern','4232171112199','12512');

INSERT INTO item (number ,name, ean, price) VALUES ('68','Beyerdynamic Team Tygr Streaming pakke','2419323595813','5707');

INSERT INTO item (number ,name, ean, price) VALUES ('69','Logitech G432 Gaming Headset','5315353898969','17867');

INSERT INTO item (number ,name, ean, price) VALUES ('70','3Dconnexion Spacemouse Enterprise Pakke','8928849346933','10701');

INSERT INTO item (number ,name, ean, price) VALUES ('71','Razer BlackWidow Elite Gaming Tastatur','3372797682475','11929');

INSERT INTO item (number ,name, ean, price) VALUES ('72','BlueWalker PowerWalker UPS VFI 1000 TG','9277525725218','19797');

INSERT INTO item (number ,name, ean, price) VALUES ('73','Samsung 49" LED C49J890','9487712547951','7354');

INSERT INTO item (number ,name, ean, price) VALUES ('74','Acer 25" gamingskjerm Predator XB253QGX','8597488689519','8729');

INSERT INTO item (number ,name, ean, price) VALUES ('75','Acer 49" 4K skjerm EB490QK','1811129148936','18798');

INSERT INTO item (number ,name, ean, price) VALUES ('76','Microsoft Windows 10 Home �?? Download','7293261682691','1555');

INSERT INTO item (number ,name, ean, price) VALUES ('77','Epson Ecotank ET-7700','4468165911113','6953');

INSERT INTO item (number ,name, ean, price) VALUES ('78','Brother ADS2700W','1259615216438','3128');

INSERT INTO item (number ,name, ean, price) VALUES ('79','Wacom Cintiq 22','7558265922569','13798');

INSERT INTO item (number ,name, ean, price) VALUES ('80','Wacom One 13 Pen Display','4786798393335','9331');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1F-12-1-02','1','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2D-6-1-02','2','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2E-12-1-03','3','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2D-10-1-01','4','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2D-1-1-01','5','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1C-2-1-01','6','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1A-10-1-01','7','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1B-7-1-01','8','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1D-4-1-02','9','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1A-13-1-03','10','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1A-9-1-03','11','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1B-10-1-01','12','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('3A-9-1-03','13','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2E-8-1-01','14','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2D-15-1-03','15','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1B-14-1-02','16','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1B-8-1-02','17','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1E-2-1-02','18','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1F-1-1-03','19','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1B-1-1-01','20','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2A-13-1-02','21','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2F-4-1-03','22','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1E-12-1-01','23','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2E-1-1-01','24','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2A-10-1-02','25','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1B-15-1-02','26','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1B-4-1-02','27','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1B-13-1-03','28','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2F-5-1-01','29','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1B-9-1-02','30','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2C-2-1-01','31','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2F-3-1-02','32','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1B-2-1-01','33','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2E-11-1-02','34','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1C-15-1-01','35','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2E-3-1-01','36','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2F-2-1-01','37','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2A-1-1-01','38','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1A-3-1-01','39','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1E-5-1-02','40','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1D-7-1-01','41','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1E-8-1-01','42','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1D-9-1-02','43','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('3F-12-1-02','44','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1E-3-1-03','45','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2F-2-1-02','46','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2F-11-1-02','47','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2A-13-1-03','48','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1F-8-1-01','49','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2F-13-1-01','50','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2E-15-1-03','51','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1C-3-1-01','52','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1A-2-1-01','53','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2C-4-1-02','54','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2D-12-1-02','55','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2A-7-1-03','56','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1B-7-1-03','57','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2D-14-1-03','58','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('3E-5-1-02','59','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2E-5-1-02','60','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1E-13-1-03','61','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1E-15-1-01','62','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1A-15-1-03','63','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1E-10-1-01','64','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1B-11-1-02','65','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2A-6-1-02','66','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2E-6-1-01','67','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2A-14-1-02','68','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1E-4-1-02','69','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1C-11-1-03','70','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('3C-3-1-01','71','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2A-2-1-01','72','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('3B-8-1-02','73','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2B-13-1-01','74','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2A-7-1-02','75','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('3A-13-1-02','76','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1F-2-1-03','77','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('2B-13-1-03','78','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1A-11-1-01','79','100','100');

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES ('1B-9-1-03','80','100','100');

INSERT INTO logistics\_user (id, first\_name, last\_name, email, password, printer) VALUES ('hkom', 'Hans Kristian', 'Markeseth', 'hanskristianom@gmail.com', '123456', 'print1');

INSERT INTO logistics\_user (id, first\_name, last\_name, email, password, printer) VALUES ('crtv', 'Christopher', 'Tveråen', 'christopher.tveråen@gmail.com', '123456', 'print2');

INSERT INTO logistics\_user (id, first\_name, last\_name, email, password, printer) VALUES ('maha', 'Marthin', 'Hauge', 'marthin.hauge@gmail.com', '123456', 'print3');

INSERT INTO shipment (number, short\_description) VALUES (1, 'PUP Sandefjord');

INSERT INTO shipment (number, short\_description) VALUES (2, 'PostNord');

INSERT INTO shipment (number, short\_description) VALUES (3, 'Posten');

INSERT INTO shipment (number, short\_description) VALUES (4, 'PUP Oslo');

INSERT INTO shipment (number, short\_description) VALUES (5, 'PostNord SE');

INSERT INTO shipment (number, short\_description) VALUES (6, 'PostNord DK');

INSERT INTO shipment (number, short\_description) VALUES (7, 'Porterbuddy');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('64','hkom','1F-12-1-02','4','2020-7-29','16:04:21','0','1','4','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('31','crtv','2D-6-1-02','4','2020-1-4','10:01:21','0','2','6','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('47','hkom','2E-12-1-03','5','2020-4-1','13:32:22','0','3','5','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('14','hkom','2D-10-1-01','5','2020-6-16','11:47:48','0','4','8','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('16','hkom','2D-1-1-01','2','2020-10-8','12:07:12','0','5','5','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('73','crtv','1C-2-1-01','4','2020-8-11','10:42:33','0','6','1','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('10','hkom','1A-10-1-01','6','2020-7-26','11:46:24','0','7','2','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('26','crtv','1B-7-1-01','6','2020-2-16','10:28:05','0','8','3','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('39','crtv','1D-4-1-02','3','2020-4-10','18:10:23','0','9','7','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('19','hkom','1A-13-1-03','6','2020-7-23','10:17:17','0','10','3','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('72','crtv','1A-9-1-03','3','2020-1-15','12:43:04','0','11','2','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('27','hkom','1B-10-1-01','5','2020-4-14','10:47:36','0','12','7','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('73','hkom','3A-9-1-03','5','2020-5-26','15:01:36','0','13','8','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('28','hkom','2E-8-1-01','4','2020-10-19','11:11:07','0','14','1','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('14','hkom','2D-15-1-03','2','2020-4-26','14:02:31','0','15','3','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('16','crtv','1B-14-1-02','6','2020-10-27','13:33:48','0','16','6','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('29','hkom','1B-8-1-02','6','2020-9-3','11:20:06','0','17','4','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('70','hkom','1E-2-1-02','6','2020-7-19','13:08:23','0','18','3','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('7','hkom','1F-1-1-03','4','2020-10-25','11:48:37','0','19','6','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('43','crtv','1B-1-1-01','2','2020-11-28','10:21:44','0','20','8','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('79','crtv','2A-13-1-02','4','2020-3-5','14:42:38','0','21','5','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('40','crtv','2F-4-1-03','5','2020-7-6','16:46:17','0','22','2','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('51','crtv','1E-12-1-01','5','2020-7-12','11:20:21','0','23','1','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('32','hkom','2E-1-1-01','4','2020-1-21','12:33:21','0','24','4','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('48','hkom','2A-10-1-02','3','2020-10-15','12:18:04','0','25','2','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('64','crtv','1B-15-1-02','6','2020-10-8','11:35:25','0','26','7','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('53','hkom','1B-4-1-02','5','2020-5-13','14:20:30','0','27','9','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('16','hkom','1B-13-1-03','4','2020-1-25','11:41:06','0','28','6','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('58','hkom','2F-5-1-01','2','2020-10-20','14:43:45','0','29','7','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('34','hkom','1B-9-1-02','5','2020-8-17','16:17:48','0','30','2','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('73','crtv','2C-2-1-01','5','2020-8-11','15:23:18','0','31','6','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('3','hkom','2F-3-1-02','2','2020-8-13','14:12:35','0','32','5','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('57','crtv','1B-2-1-01','2','2020-10-11','17:45:33','0','33','3','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('35','hkom','2E-11-1-02','6','2020-5-28','17:04:32','0','34','9','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('14','crtv','1C-15-1-01','4','2020-3-19','17:08:31','0','35','9','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('21','crtv','2E-3-1-01','2','2020-4-5','13:45:43','0','36','3','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('42','hkom','2F-2-1-01','6','2020-1-25','11:35:06','0','37','5','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('19','hkom','2A-1-1-01','4','2020-6-18','13:14:07','0','38','1','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('13','crtv','1A-3-1-01','4','2020-10-25','13:23:44','0','39','3','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('67','crtv','1E-5-1-02','4','2020-6-14','10:24:11','0','40','8','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('49','hkom','1D-7-1-01','6','2020-6-2','16:01:22','0','41','8','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('55','hkom','1E-8-1-01','3','2020-6-23','14:28:15','0','42','2','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('79','hkom','1D-9-1-02','1','2020-7-14','15:07:07','0','43','3','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('25','hkom','3F-12-1-02','5','2020-11-2','14:11:35','0','44','6','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('69','hkom','1E-3-1-03','1','2020-7-10','14:48:21','0','45','5','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('36','hkom','2F-2-1-02','4','2020-7-15','12:11:25','0','46','7','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('5','crtv','2F-11-1-02','2','2020-7-10','12:11:37','0','47','1','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('48','crtv','2A-13-1-03','4','2020-11-22','16:40:42','0','48','4','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('23','crtv','1F-8-1-01','4','2020-7-21','18:20:33','0','49','3','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('39','crtv','2F-13-1-01','2','2020-7-21','11:31:20','0','50','8','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('12','hkom','2E-15-1-03','2','2020-6-8','13:31:44','0','51','2','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('76','hkom','1C-3-1-01','2','2020-2-19','13:44:03','0','52','7','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('73','hkom','1A-2-1-01','2','2020-7-25','17:38:35','0','53','8','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('42','hkom','2C-4-1-02','4','2020-8-5','15:06:31','0','54','6','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('34','hkom','2D-12-1-02','4','2020-9-23','13:12:44','0','55','2','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('10','hkom','2A-7-1-03','1','2020-1-21','18:06:42','0','56','2','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('63','hkom','1B-7-1-03','3','2020-1-17','16:20:13','0','57','5','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('28','crtv','2D-14-1-03','5','2020-8-16','10:26:35','0','58','3','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('47','crtv','3E-5-1-02','1','2020-5-19','11:22:00','0','59','1','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('62','hkom','2E-5-1-02','6','2020-6-16','18:31:43','0','60','8','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('5','hkom','1E-13-1-03','2','2020-11-11','12:18:45','0','61','4','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('59','hkom','1E-15-1-01','2','2020-5-1','16:38:06','0','62','2','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('41','hkom','1A-15-1-03','6','2020-9-21','10:42:10','0','63','4','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('1','crtv','1E-10-1-01','4','2020-7-26','15:31:41','0','64','9','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('20','hkom','1B-11-1-02','4','2020-5-2','10:32:45','0','65','2','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('18','hkom','2A-6-1-02','6','2020-3-22','15:43:13','0','66','2','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('66','crtv','2E-6-1-01','5','2020-3-18','10:46:26','0','67','9','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('55','hkom','2A-14-1-02','4','2020-8-21','11:30:08','0','68','6','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('40','crtv','1E-4-1-02','3','2020-8-14','15:01:25','0','69','5','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('70','hkom','1C-11-1-03','4','2020-8-15','15:00:32','0','70','9','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('73','hkom','3C-3-1-01','6','2020-1-15','10:22:00','0','71','9','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('37','hkom','2A-2-1-01','4','2020-1-22','11:12:36','0','72','6','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('65','crtv','3B-8-1-02','2','2020-7-18','12:21:42','0','73','4','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('3','crtv','2B-13-1-01','4','2020-7-17','14:32:17','0','74','1','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('13','hkom','2A-7-1-02','5','2020-8-13','18:34:17','0','75','7','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('52','hkom','3A-13-1-02','3','2020-8-6','12:05:25','0','76','5','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('10','hkom','1F-2-1-03','6','2020-9-10','10:05:08','0','77','2','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('3','crtv','2B-13-1-03','3','2020-8-12','17:14:04','0','78','6','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('36','hkom','1A-11-1-01','3','2020-7-14','11:45:03','0','79','6','0');

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('74','crtv','1B-9-1-03','3','2020-9-2','17:41:03','0','80','5','0');

Definer rutiner og triggere

DELIMITER //

CREATE TRIGGER on\_order

BEFORE INSERT ON `order` FOR EACH ROW

BEGIN

UPDATE location SET available\_quantity = (available\_quantity - NEW.quantity) WHERE location\_id = NEW.location;

end //

DELIMITER ;

DELIMITER //

CREATE TRIGGER log\_update\_order

BEFORE UPDATE ON `order`

FOR EACH ROW

INSERT INTO order\_history SET sales\_order = OLD.sales\_order,

commerce\_user = OLD.commerce\_user,

logistics\_user = OLD.logistics\_user,

location = OLD.location,

shipment = OLD.shipment,

date = OLD.date,

time = OLD.time,

status = OLD.status,

item = OLD.item,

quantity = OLD.quantity,

price = OLD.price,

action = 'UPDATE',

change\_time = NOW();

DELIMITER ;

DELIMITER //

CREATE TRIGGER log\_delete\_order

BEFORE DELETE ON `order`

FOR EACH ROW

INSERT INTO order\_history SET sales\_order = OLD.sales\_order,

commerce\_user = OLD.commerce\_user,

logistics\_user = OLD.logistics\_user,

location = OLD.location,

shipment = OLD.shipment,

date = OLD.date,

time = OLD.time,

status = OLD.status,

item = OLD.item,

quantity = OLD.quantity,

price = OLD.price,

action = 'DELETE',

change\_time = NOW();

DELIMITER ;

DELIMITER //

CREATE TRIGGER quantity\_check

BEFORE INSERT

ON `order`

FOR EACH ROW

BEGIN

DECLARE item\_quantity INT;

SET item\_quantity = (SELECT available\_quantity FROM location WHERE location\_id = NEW.location);

IF (item\_quantity < NEW.quantity) THEN

SIGNAL SQLSTATE '45000' SET MESSAGE\_TEXT = 'The order can not be completed as there are too few items available';

END if;

end //

DELIMITER ;

DELIMITER //

CREATE PROCEDURE add\_item (IN i\_name varchar(64), i\_ean bigint, i\_price int, l\_location varchar(64), l\_available\_quantity int, l\_total\_quantity int)

BEGIN

INSERT INTO item (name, ean, price) VALUES (i\_name, i\_ean, i\_price);

SET @item\_number = (SELECT number FROM item WHERE ean = i\_ean);

INSERT INTO location (location\_id, item\_number, available\_quantity, total\_quantity) VALUES (l\_location, @item\_number, l\_available\_quantity, l\_total\_quantity);

end //

DELIMITER ;

DELIMITER //

CREATE PROCEDURE delete\_order (IN o\_sales INT)

BEGIN

DELETE FROM `order` WHERE sales\_order = o\_sales;

end //

DELIMITER ;

DELIMITER //

CREATE PROCEDURE create\_shipment (IN s\_desc text)

BEGIN

SET @latest\_shipment = (SELECT MAX(number) FROM shipment);

INSERT INTO shipment VALUES ((@latest\_shipment + 1), s\_desc);

end //

DELIMITER ;

DELIMITER //

CREATE TRIGGER price\_order

BEFORE INSERT ON `order` FOR EACH ROW

BEGIN

DECLARE latest\_sale INT;

SET latest\_sale = (SELECT MAX(sales\_order) FROM `order`);

SET @price = (SELECT price FROM item WHERE number = NEW.item);

SET NEW.price = (@price \* NEW.quantity);

end //

DELIMITER ;

DELIMITER //

CREATE FUNCTION most\_expensive\_order()

RETURNS INT

DETERMINISTIC

BEGIN

DECLARE largestSum BIGINT;

DECLARE most\_expensive\_order int;

SET largestSum = (SELECT MAX(price) FROM `order`);

SET most\_expensive\_order = (SELECT sales\_order FROM `order` WHERE price = largestSum);

RETURN (most\_expensive\_order);

end //

DELIMITER ;

DELIMITER //

CREATE FUNCTION promised\_income()

RETURNS BIGINT

DETERMINISTIC

BEGIN

RETURN (SELECT SUM(price) FROM `order` WHERE status = 0);

end //

DELIMITER //

CREATE TRIGGER on\_order\_complete

BEFORE UPDATE ON `order` FOR EACH ROW

BEGIN

IF(NEW.status = 1) THEN

UPDATE location SET total\_quantity = (total\_quantity - NEW.quantity) WHERE location\_id = NEW.location OR location\_id = OLD.location;

END IF;

end //

DELIMITER ;

Tester lagrede rutiner og triggere i databasen

CALL add\_item('TestItem', '1234567896593', '1000', '5F-12-1-01', '100', '100');

CALL create\_shipment('porterbuddy');

CALL delete\_order(1);

CALL most\_expensive\_order();

SELECT \* FROM `order` WHERE sales\_order = most\_expensive\_order();

SELECT promised\_income() as "order\_total";

Dette kjører de forskjellige lagrede rutinene vi har i databasen.

INSERT INTO `order` (commerce\_user, logistics\_user, location, shipment, date, time, status, item, quantity, price) VALUES ('64','hkom','1F-12-1-02','4','2020-10-23','16:04:21','0','1','4','0');

Dette vil kjøre trigger for å telle ned varer, som da holder en forretningsregler om databasen, siden vi kan ikke selge flere varer enn det vi har på lager. Den sjekker også om vi har nok varer på lager. Om vi ikke har det sender den en error melding.

Denne vil også kjøre price\_order som er en trigger som regner ut den totale prisen på ordren basert på hvor mange av ordren man kjøper.

UPDATE `order` SET status = 1 WHERE sales\_order = MAX(sales\_order);

Dette vil kjøre trigger for å telle ned total\_quantity og lagre den historiske dataen om ordren.

DELETE FROM `order` WHERE sales\_order = (SELECT MAX(sales\_order));

Dette vil kjøre triggeren som lagrer historiske data om sletting av ordre.