

## 8.1

```
SELECT list_price,  
       FORMAT(list_price, 1) AS formatted_price,  
       CONVERT(list_price, SIGNED) AS converted_price,  
       CAST(list_price AS SIGNED) AS casted_price  
FROM products;
```

## 8.2

```
SELECT date_added,  
       CAST(date_added AS date) AS casted_date,  
       CAST(date_added AS CHAR(7)) AS year_and_month,  
       CAST(date_added AS time) AS time_only  
FROM products;
```

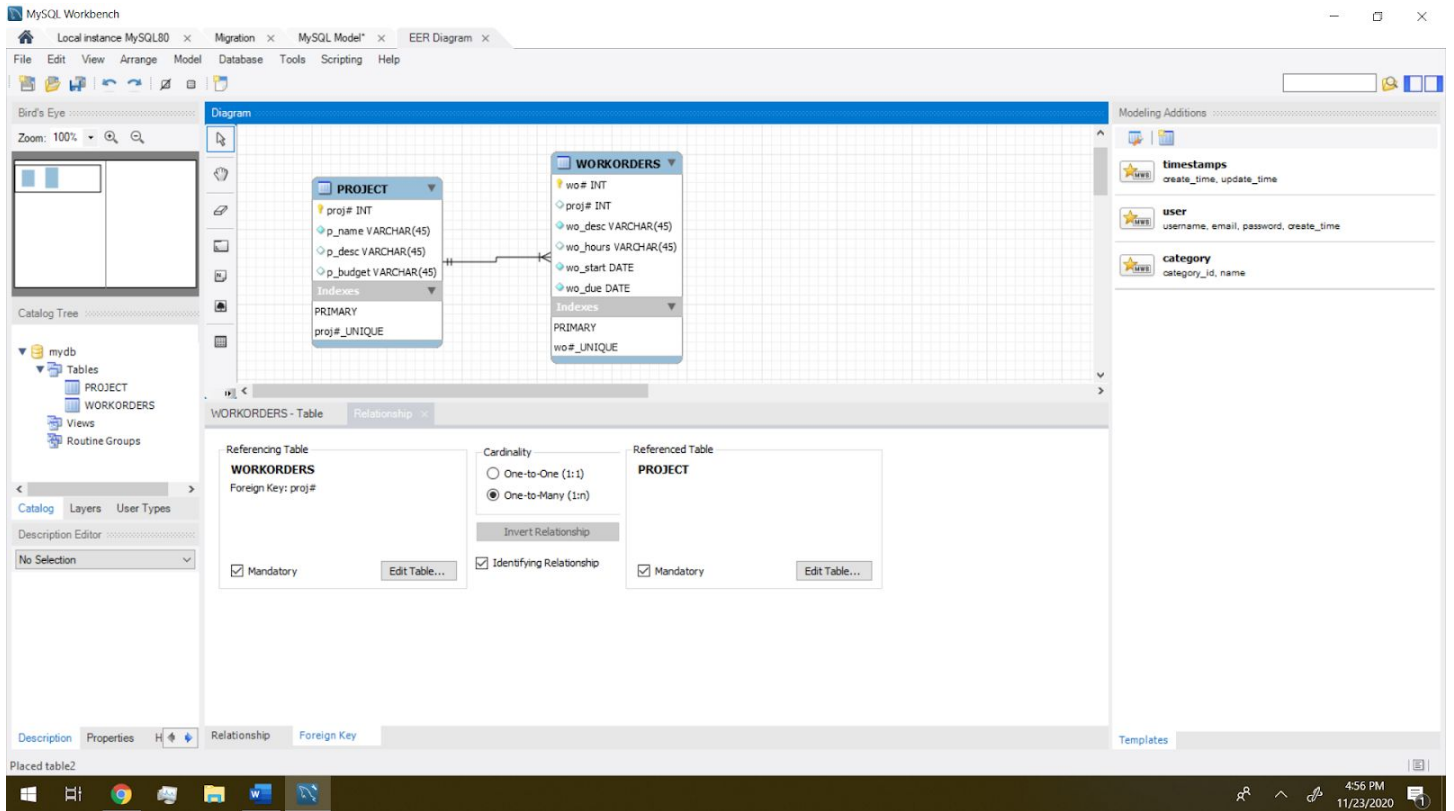
## 9.1

```
SELECT order_date,  
       DATE_FORMAT(order_date, '%Y') AS four_digit_year,  
       DATE_FORMAT(order_date, '%b-%d-%Y') AS abr_months,  
       DATE_FORMAT(order_date, '%h:%i %p') AS hour_min,  
       DATE_FORMAT(order_date, '%m/%d/%y %H:%I') AS full_date  
FROM orders;
```

## 9.2

```
SELECT email_address,  
       REGEXP_REPLACE(  
         REGEXP_SUBSTR(email_address, '^[A-Z]*@'), '@', '') AS user_name,  
       REGEXP_REPLACE(  
         REGEXP_SUBSTR(email_address, '@([A-Z]|\.)*'), '@', '') AS domain_name  
FROM administrators
```

## 10.1



## 11.1

```
CREATE INDEX addresses_zip_code_index
ON addresses (zip_code)
```

## 11.2

```
CREATE DATABASE IF NOT EXISTS my_web_db;
USE my_web_db;
CREATE TABLE users
(
    user_id            INT            PRIMARY KEY            UNIQUE,
    email_address      VARCHAR(100),
    first_name         VARCHAR(45),
    last_name          VARCHAR(45)
);
CREATE TABLE products
(
    product_id         INT            PRIMARY KEY            UNIQUE,
    product_name       VARCHAR(45)
);
CREATE TABLE downloads
(
    download_id        INT            PRIMARY KEY            UNIQUE,
    user_id            INT,
    download_date       DATETIME,
    filename           VARCHAR(50),
    product_id         INT,
    CONSTRAINT downloads_fk_users
        FOREIGN KEY (user_id)
            REFERENCES users (user_id),
    CONSTRAINT downloads_fk_products
        FOREIGN KEY (product_id)
            REFERENCES products (product_id)
);
```

### 11.3

```
USE my_web_db;
INSERT INTO users
    (user_id, email_address, first_name, last_name)
VALUES (1,"johnsmith@gmail.com","John","Smith");
INSERT INTO users
    (user_id, email_address, first_name, last_name)
VALUES (2,"janedoe@yahoo.com","Jane","Doe");
INSERT INTO products
    (product_id, product_name)
VALUES (1,"Local Music Vol 1");
INSERT INTO products
    (product_id, product_name)
VALUES (2,"Local Music Vol 2");
INSERT INTO downloads
    (download_id, user_id, download_date, filename, product_id)
VALUES (1,1,NOW(),"pedals_are_falling.mp3",2);
INSERT INTO downloads
    (download_id, user_id, download_date, filename, product_id)
VALUES (2,2,NOW(),"turn_signal.mp3",1);
INSERT INTO downloads
    (download_id, user_id, download_date, filename, product_id)
VALUES (3,2,NOW(),"pedals_are_falling.mp3",2);
SELECT email_address, first_name, last_name, download_date, filename,
product_name
FROM users
JOIN downloads
ON users.user_id = downloads.user_id
JOIN products
ON products.product_id = downloads.product_id
ORDER BY email_address DESC, product_name ASC;
```

### 11.4

```
ALTER TABLE products
ADD COLUMN product_price DECIMAL(5,2) DEFAULT 9.99,
ADD COLUMN add_date DATE;
```

### 11.5

```
ALTER TABLE users
MODIFY first_name VARCHAR(20) NOT NULL;
UPDATE users
SET first_name = null
WHERE user_id = 1;
UPDATE users
SET first_name = "123456789012345678901"
WHERE user_id = 1;
```

## 12.1

```
USE my_guitar_shop;
CREATE OR REPLACE VIEW order_item_products AS
    SELECT o.order_id, order_date, tax_amount, ship_date, product_name,
item_price,
        discount_amount, item_price - discount_amount AS final_price,
quantity, (item_price - discount_amount) * quantity AS item_total
    FROM orders AS o
    JOIN order_items AS oi
    ON o.order_id = oi.order_id
    JOIN products AS p
    ON oi.product_id = p.product_id;
```

## 12.2

```
CREATE OR REPLACE VIEW product_summary AS
    SELECT product_name, COUNT(order_id) AS order_count, SUM(quantity) AS
order_quantity_total, SUM(item_total) AS order_total
    FROM order_item_products
    GROUP BY product_name;
```

## 12.3

```
SELECT product_name, order_total
FROM product_summary
ORDER BY order_total DESC
LIMIT 5
```