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Lab 4 Short Essay

Check constraints are used in order to check the value that is entered into a database, in order to enforce domain integrity. Check constraints use Booleans to return values that can with be true or false, based on the parameters set by the logical operators. Allowing check constraints in records can prove to be beneficial primarily because they can sets limits to their appropriate fields. For example, some friends and I want to start decide to start our own social media website, and we intend implementing a minimum age requirement of thirteen for users who would like to register. Adding a check constraint in the database where the users sign up information will live is one way to do so. When creating the table, the age row will look something like:

```
AGE        INT          NOT NULL       CHECK (AGE >= 13),
```

Now, since there is a check restraint on the age row, and the field cannot be null, if the user does not meet the minimum age requirement their login information will not post. The user will then be alerted with a prompt that will notify them that they're not of age. Another example of a check constraint can be if I needed to implement a new minimum wage requirement for an existing database. New Yorks Department of Labor decides to increase the minimum wage to ten dollars. To update the existing database and add a constraint I can do so by altering the table, as seen below.

```
ALTER     TABLE      EMPLOYEES

MODIFY    SALARY     NOT NULL CHECK (WAGE >= 10.00);
```

An example of a bad check constraint would be if I decided to a constraint to a field that is allowed to be null. This essentially will defeat the value of the constraint because its purpose can be easily averted.