

## CTI110 DHW1 Help

Here is an example table with two themes in it

Team Name	Team Nickname	Team Colors	Team Location	Coach First Name	Coach Last name	Coach Address	Coach City
Carolina	Tar Heels	Carolina Blue	Chapel Hill NC	Roy	Williams	123 Main Street	Chapel Hill
Duke	Blue Devils	Dark Blue	Durham NC	Mike	K	123 Main Street	Durham NC
NCSU	Wolfpack	Red	Raleigh NC	Kevin	Keats	123 Main Street	Raleigh NC

Looking at the above table, we can see we have two different themes in the tables. Tables should only collect information about 1 theme to be in first normal form.

So, we should separate the attributes from each other and place the attributes with the right theme. Here it is pretty easy to see what the two themes are: Teams and Coaches.

I only added a little bit of information but imagine doing this for a city league where you might have 100's of teams and coaches. Then we could add on players.

### Team Table

Team Name	Team Nickname	Team Colors	Team Location
Carolina	Tar Heels	Carolina Blue	Chapel Hill NC
Duke	Blue Devils	Dark Blue	Durham NC
NCSU	Wolfpack	Red	Raleigh NC

### Coach Table

Coach First Name	Coach Last name	Coach Address	Coach City
Roy	Williams	123 Main Street	Chapel Hill
Mike	K	123 Main Street	Durham NC
Kevin	Keats	123 Main Street	Raleigh NC

So now let's add our primary keys:

#### Team Table

Team ID	Team Name	Team Nickname	Team Colors	Team Location
T0001	Carolina	Tar Heels	Carolina Blue	Chapel Hill NC
T0002	Duke	Blue Devils	Dark Blue	Durham NC
T0003	NCSU	Wolfpack	Red	Raleigh NC

#### Coach Table

Coach ID	Coach First Name	Coach Last name	Coach Address	Coach City
C0001	Roy	Williams	123 Main Street	Chapel Hill
C0002	Mike	K	123 Main Street	Durham NC
C0003	Kevin	Keats	123 Main Street	Raleigh NC

The primary keys will uniquely identify each row in our tables. Team name could not be a key as you could have two teams with that same name with a different coach. Same goes for coaches as you could like in Lumberton or another location where you have lot of names being similar; i.e. John Locklear

Now how do we relate the tables?

We use a foreign key to do this. A foreign key is the primary key of the table you wish to link to the table. That way if I pull a team report I can know who all the coaches are.

#### Team Table

Team ID	Team Name	Team Nickname	Team Colors	Team Location	Coach ID
T0001	Carolina	Tar Heels	Carolina Blue	Chapel Hill NC	C0001
T0002	Duke	Blue Devils	Dark Blue	Durham NC	C0002
T0003	NCSU	Wolfpack	Red	Raleigh NC	C0003

So, we add the foreign key and thus are tables are related

I only used two themes here as your assignment may have 2 to 4 tables.

If you follow this example you should be able to complete the homework