Gramophone creates and publishes classical music CDs. The company brings together orchestras, conductors, and soloists to perform certain works by certain composers. Orchestra performances of such works may be live or in studio. Gramophone then makes recordings of these performances on particular dates. Each work has a name, a completion date, and may contain several movements; a recording of a performance is a recording of a particular movement. Recordings appear on a track on one or more CDs. For example, the movements of Beethoven’s Fifth Symphony may appear on different tracks (one for each movement) of a CD titled “Beethoven’s Fifth Symphony;” and/or one or more movements of that same work may appear on another CD titled “Beethoven’s Symphonies” or on a CD titled “Greatest Symphonies.” CDs appear in different catalogs, and catalogs have entries for many CDs.

Orchestras have a lead conductor, and a conductor is a lead conductor for no more than one orchestra; however, all conductors are affiliated with only one orchestra, although conductors may be invited to conduct different orchestras. This means that the lead conductor of an orchestra may not be the conductor chosen to conduct a particular orchestra for a given performance. Soloists also may work with different orchestras but are not directly affiliated with any particular orchestra. If any soloists are needed for a performance, there may be one or more. Orchestras, conductors, and soloists all have names and may each have many contact addresses. Conductors and soloists may have up to four phone numbers (home, work, mobile, and fax), and orchestras may have up to two phone numbers (main and fax).

Composers have names, birth dates, and city of birth.

Create an informal ER diagram that identifies the entities, attributes (the ones described above as well as all PKs and FKs), and relationships in the data.
Gramophone Solution