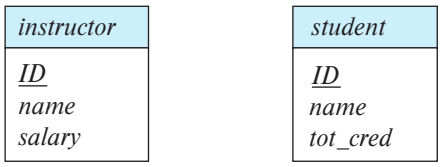

Figure 6.1 E-R diagram showing entity sets *instructor* and *student*.

the entity set. The second part contains the names of all the attributes of the entity set. The E-R diagram in Figure 6.1 shows two entity sets *instructor* and *student*. The attributes associated with *instructor* are *ID*, *name*, and *salary*. The attributes associated with *student* are *ID*, *name*, and *tot_cred*. Attributes that are part of the primary key are underlined (see Section 6.5).

6.2.2 Relationship Sets

A **relationship** is an association among several entities. For example, we can define a relationship *advisor* that associates instructor Katz with student Shankar. This relationship specifies that Katz is an advisor to student Shankar. A **relationship set** is a set of relationships of the same type.

Consider two entity sets *instructor* and *student*. We define the relationship set *advisor* to denote the associations between students and the instructors who act as their advisors. Figure 6.2 depicts this association. To keep the figure simple, only some of the attributes of the two entity sets are shown.

A **relationship instance** in an E-R schema represents an association between the named entities in the real-world enterprise that is being modeled. As an illustration, the individual *instructor* entity Katz, who has instructor *ID* 45565, and the *student* entity Shankar, who has student *ID* 12345, participate in a relationship instance of *advi-*

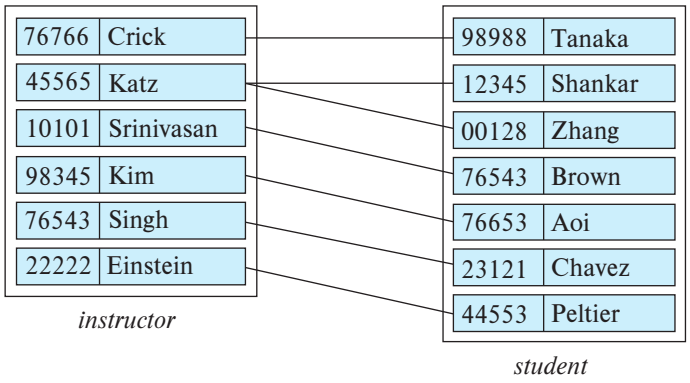

Figure 6.2 Relationship set *advisor* (only some attributes of *instructor* and *student* are shown).