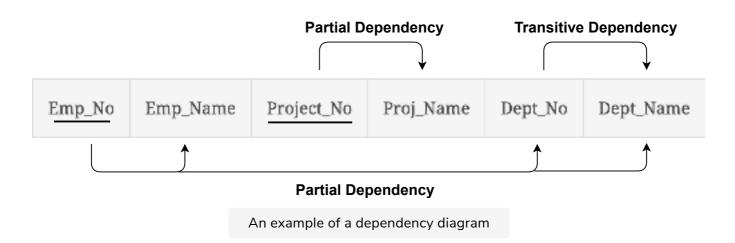
## **Dependency Diagrams**

In this lesson, we will look at the diagrammatic representation of functional dependencies.

we'll cover the following ^
Dependency diagrams

## Dependency diagrams #

A dependency diagram illustrates the various dependencies that might exist in a **non-normalized** table. A non-normalized table is one that has data redundancy in it. This is illustrated below:



As we can observe from the table above, <a href="Project\_No">Project\_No</a> and <a href="Emp\_No">Emp\_No</a>, combined, are the primary key (as the combination of these two attributes can be used to identify each record uniquely).

The following dependencies can be identified from this table:

## Partial dependencies:

ullet Project\_No o Proj\_Name

Reason: Since the name of the project is only dependent upon part of the multi-attribute PK, i.e., Project\_No, this results in partial dependency.

```
• Emp_No \rightarrow Emp_Name, Dept_No
```

Reason: Similar to the example above, we see that these two attributes only depend on part of the composite key and not the whole.

## Transitive dependency:

• Dept\_No ightarrow Dept\_Name

Reason: Since a non-key attribute (Dept\_Name) is dependent on another non-key attribute (Dept\_No), this results in a transitive dependency.

We have highlighted some of the dependencies that exist in this table, but there are many more.

The next lesson will include a short quiz to test your knowledge of functional dependencies.