**CONCEPTUAL DATABASE DESIGN:**

To implement LinkedIn job posting analysis, Here are some of the key entities mentioned which will be helpful in drawing meaning full insights.

1. Job Postings
2. Job industries
3. Job skills
4. Benefits
5. Companies
6. Company Specialties
7. Company Industries
8. Employee counts
9. **Job Postings:** It is a central repository for job listings and is commonly used in job search platforms. The attributes used in this table are, job\_id , company\_id , title, description, skills\_desc, work\_type, location, currency, remote\_allowed, sponsored, max\_salary, med\_salary, min\_salary, pay\_period, compensation\_type, formatted\_work\_type, formatted\_experience\_level, applies, views, original\_listed\_time, listed\_time, expiry, closed\_time, posting\_domain, job\_posting\_url, application\_url , application\_type .

Primary key: job\_id

Foreign key: company\_id

1. **Job industries:** The job\_industries table is used to associate job postings with specific industries. It serves as a bridge between job postings and industries, allowing users to categorize job listings based on the industry they belong to. The attributes used in this table are, job\_id, industry\_id

We are creating composite primary key with (job\_id,industry\_id).

Foreign key: job\_id

1. **Job skills:** This table contains information about the skills required for various job postings. The attributes in this table are, job\_id, skill\_abr.

We are creating composite primary key with (job\_id, skill\_abr)

Foreign key: job\_id

1. **Benefits:** The benefits table stores data related to benefits offered by companies in job postings. It includes information about the types of benefits (e.g., 401K, Medical Insurance) and whether these benefits are explicitly tagged or inferred from the job posting text. The attributes in this table are, job\_id, type, inferred.

We are creating composite primary key with (job\_id, type)

Foreign key: job\_id

**5.Companies:** The companies table contains data about various companies and serves as a reference for job postings. It includes details about the company's name, description, size, location, and more. This table is typically linked to the job\_postings table to associate job postings with specific companies. The attributes in this table are, company\_id, name, description, company\_size, address, city, state, country, zip\_code, url.

Primary key: company\_id

6.**Employee counts:** This table tracks the number of employees at each company. It often includes information about the company's follower count on a platform. Employee counts are crucial for understanding the size and workforce of different companies. The attributes in this table are, company\_id, time\_recorded, employee\_count, follower\_count.

We are creating composite primary key with company\_id, time\_recorded, employee\_count, follower\_count

Foreign key: company\_id

7. **Company specialities:**

This table associates companies with their specializations or areas of expertise. The attributes in this table are, company\_id, speciality.

We are creating composite primary key with company\_id, speciality

Foreign key: company\_id

8.**Company\_industries :**

The company\_industries table links companies with the industries they are associated with. The attributes in this table are company\_id, industry .

Primary key: company\_id

Foreign key: company\_id