This Entity-Relationship Diagram (ERD) models the data structure for managing Google Ad Campaigns, covering ad creation, performance tracking, budgeting, and audience targeting. It illustrates the key entities involved and the relationships between them.

Key Entities
- **Campaign:** Represents an ad campaign with a unique ID, campaign name, start date, end date, budget, and status (active/inactive).
- **Ad:** Represents individual ads within a campaign, characterized by a unique ID, ad name, type (text, image, video), content, destination URL, and a foreign key referencing the campaign it belongs to.
- **Ad Group:** Groups multiple ads under a specific theme, containing a unique ID, ad group name, bid strategy, and a foreign key referencing the campaign.
- **Keyword:** Represents search terms targeted by an ad group, including a unique ID, keyword text, match type (broad, phrase, exact), and a foreign key referencing the ad group.
- **Audience:** Defines targeted user segments based on demographics, interests, or behavior, including a unique ID, audience name, and targeting criteria.
- **Ad Placement:** Tracks where ads appear, containing a unique ID, placement type (search, display, video), website/app name, and a foreign key referencing the ad.
- **Performance Metrics:** Stores ad performance data, including a unique ID, impressions, clicks, conversions, cost-per-click (CPC), and a foreign key referencing the ad.
- **Budget Allocation:** Manages financial planning for campaigns, with a unique ID, allocated amount, spent amount, and a foreign key referencing the campaign.

Relationships and Cardinalities
- **Campaign Management:** A Campaign can have multiple Ad Groups (one-to-many). Each Ad Group contains multiple Ads (one-to-many).
- **Keyword Targeting:** An Ad Group can have multiple Keywords (one-to-many), and a Keyword can be used in multiple Ad Groups (many-to-many, resolved through a junction table Ad Group Keyword).
- **Audience Targeting:** A Campaign can target multiple Audiences (one-to-many), and an Audience can be used in multiple Campaigns (many-to-many, resolved through a junction table Campaign Audience).
- **Ad Performance:** Each Ad generates multiple Performance Metrics over time (one-to-many).
- **Ad Placement:** An Ad can appear in multiple Placements (one-to-many), and a Placement can feature multiple Ads (many-to-many, resolved through a junction table Ad Placement Tracking).
- **Budgeting:** A Campaign has one Budget Allocation (one-to-one).

Overall Structure and Purpose
This ERD provides a structured model for managing Google Ad Campaigns efficiently. It enables detailed tracking of ad performance, budget allocation, audience targeting, and keyword effectiveness. The use of junction tables resolves many-to-many relationships, ensuring data integrity and flexible campaign management. This model would be suitable for implementing a relational database supporting digital marketing analytics and optimization.