**Intermediate**

**What is the correlation between the number of installs and the app rating?**

**Answer:** No clear correlation: installs don’t predict ratings (R² ≈ 0.0237). High installs do not guarantee high ratings and quality matters more than popularity.

**Which app categories have the highest average rating?**

**Answer:** Top 5 categories with the highest average ratings are Events, Education, Art & Design, Books & Reference, and Personalization.

**How does the price of an app affect its average rating?**

**Answer:**

**What is the distribution of app ratings across different content ratings?**

**Answer:** Apps for Adults 18+ and Everyone 10+ have the highest average ratings, while Unrated apps have the lowest.

**Which genres have the most apps with over 1 million installs?**

**Answer**: The top 5 genres with the most apps having over 1 million installs are Tools, Entertainment, Education, Business, and Medical.

**How frequently do apps get updated? Calculate the average time between updates.**

**Answer:** On average, apps are updated **every 2,842 days (~7.8 years)**.

**What is the impact of app size on the number of installs?**

**Answer:** Larger apps tend to have slightly more installs, but app size is **not a major factor** in popularity.

**Which apps have the highest number of reviews, and what are their ratings?**

**Answer:** Candy Crush Saga (4.4), 8 Ball Pool (4.5), Duolingo (4.7), Roblox (4.5), Bowmasters (4.7) Popular apps with the **highest reviews** also have **high ratings**, showing a **strong positive user experience**.

**How does the content rating distribution differ between free and paid apps?**

**Answer:** Most content ratings belong to Everyone and Teen, with Free apps dominating these categories. Paid apps are fewer across all content ratings.

**What are the top 5 categories with the most installs?**

Answer: Games, Communication, Productivity, Social, Tools. These categories attract the most users, indicating **high demand** and potential areas for new app development or marketing focus.

**Advanced**

**What are the top 10 apps with the highest ratings, and how do their number of reviews and installs compare?**

**Answer:**

**Analyse the trend of app updates over time. Are there any noticeable patterns or seasonal trends?**

**Answer:** App updates were low from 2010 to 2013, showed slight increases between 2014 and 2016, and then rose significantly in 2017, peaking in 2018. This indicates a growing focus on maintaining and improving apps over time.

**How does the average rating of apps change with the number of installs? Create a binned analysis.**

**Answer:**

**What is the relationship between app genre and user ratings? Are certain genres consistently rated higher or lower?**

**Answer:** Higher-rated genres: Events, Words, and Puzzle apps, Lower-rated genres: Dating, Trivia, and Tools apps.