Question 5

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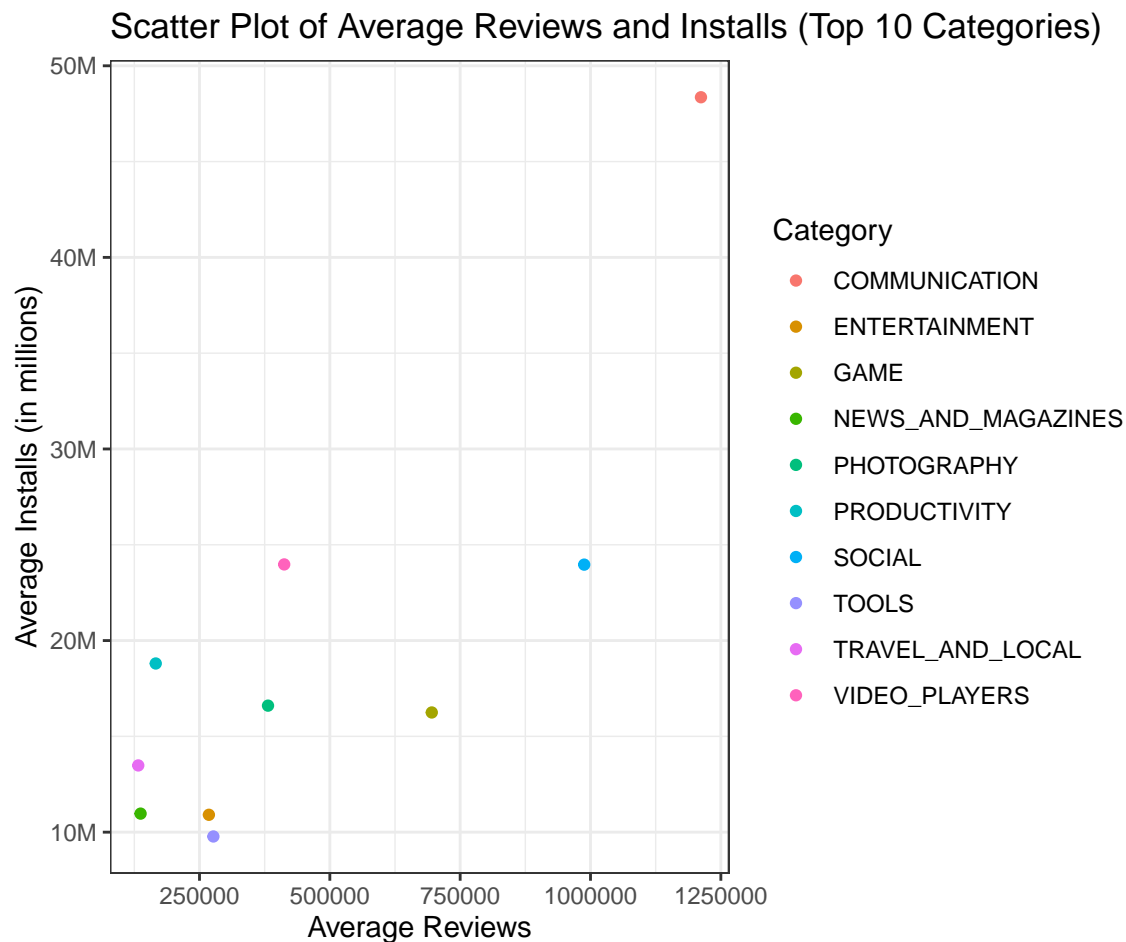
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1. Introduction

For this question we will be looking at the database of app downloads from Google to see what encourages people to download a particular app.

2. Analysis

Firstly I need to import the data.

Ok so based on the data I want to see what are the most downloaded types of apps, therefore I will look at the median number of downloads per application type. First I need to change this line to be numeric values.

Ok so now I want to see which app categories are the most used. In order to do that I am going to do a scatter plot which shows the average number of reviews of each app category, as well as the average number of downloads received by each category.

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Scatter Plot of Average Reviews and Installs (Top 10 Categories)

Ok so we can see that communication apps are by far the most installed type of app on average, having the highest average number of reviews and installations. In terms of installations it is followed by social apps and then gaming apps. The second most reviewed category seems to be video_players.

So we know what is the most used types of apps and most reviewed. However an important factor when understanding the reviews of a particular is app is whether or not they are positive. Apps with more positive reviews are likely to be used more frequently, so using the user review data set, we can compare the percentage of positive, negative and neutral reviews for each app category.

Ok now we must merge the category column to be assigned with therespective app in the Review data set.

Ok so now using the merged data we can work out the percentage of each type of review in each category.

```
## # A tibble: 10 x 4
```

```
##    Category         pos_percent neg_percent neu_percent
##    <chr>                  <dbl>       <dbl>       <dbl>
##  1 COMMUNICATION           62.7        20.6        16.7
##  2 ENTERTAINMENT           58.3        25.5        16.2
##  3 GAME                    58.1        37.5         4.37
##  4 NEWS_AND_MAGAZINES      57.6        29.3        13.1
##  5 PHOTOGRAPHY             65.7        20.4        13.9
##  6 PRODUCTIVITY            68.8        18.7        12.4
##  7 SOCIAL                  54.1        26.2        19.7
##  8 TOOLS                   60.4        17.6        22.0
##  9 TRAVEL_AND_LOCAL        60.9        21.3        17.8
## 10 VIDEO_PLAYERS           57.4        25.1        17.5
```

So as can be seen most app categories have round 60% positive reviews, 25% negative reviews and 15% neutral reviews. Communication apps have a good positive percentage relative to other app types. They have the best percentage results amongst their closest competitors in terms of installations, with 63% positive reviews and 21% negative reviews. Comparatively, social apps having 54% positive reviews and 26% negative reviews, whilst gaming apps have 58% positive reviews and 37% negative reviews. Based on these results it seems evident that the best type of app to produce would be a Communication app.