**Overview of the analysis**

The purpose of this analysis is to determine through data analysis to determine if there is any bias in customer reviews published by the Amazon Vine Program. This program receives incentives for the reviews customers leave for different products sold on the website.

The data set that I took for this analysis is for the Video Games section

**Results**

First, an AWS RDS database account and settings were created on the Amazon website

Graphical user interface, text, application

Description automatically generated

Text

Description automatically generatedTables were created in pgAdmin

PySpark method was used

The following questions had to be answered for this analysis

* How many Vine reviews and non-Vine reviews were there?

total paid reviews were 90 and the total unpaid reviews are 37831

Table

Description automatically generated

Table

Description automatically generated

* How many Vine reviews were 5 stars? How many non-Vine reviews were 5 stars?

44 reviews were paid five stars reviews and the unpaid reviews were 14704

Graphical user interface, text, application, email

Description automatically generated

* What percentage of Vine reviews were 5 stars? What percentage of non-Vine reviews were 5 stars?

Graphical user interface, text, application

Description automatically generatedThe total percentage of unpaid reviews was 38.87% and the percentage of paid reviews are 0.12%

**Summary**

Based on this analysis, since the percentage of 5-star reviews which were paid is significantly lower than the unpaid reviews, we can see that there was no bias in the paid reviews and this program is running ethically.