# Amazon Alexa Review - Sentiment Analysis

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Section: C

## **Problem Statement**

Analyzing the Amazon Alexa dataset and building classification models to predict if the sentiment of a given input sentence is positive or negative.

**URL**:

https://www.kaggle.com/datasets/sid321axn/amazon-alexa-reviews/data

### Few records of Data

amazon\_alexa.tsv (514.75 kB) Compact Column Detail 5 of 5 columns v **⋣** Add Suggestion

#### About this file

Amazon Alexa users reviews

# rating =	☐ date ☐ 2162 total values	△ variation ☐ 85% etc." 1 0% Other (475) 15%	≜ verified_reviews = [null] 92% so that is reason e 0% Other (248) 8%	# feedback = 2970 total values
5	31-Jul-18	Charcoal Fabric	Loved it!	1
4	31-Jul-18	Walnut Finish	Sometimes while playing a game, you can answer a question correctly but Alexa says you got it wrong	1
5	31-Jul-18	Charcoal Fabric	I have had a lot of fun with this thing. My 4 yr old learns about dinosaurs, i control the lights an	1
5	31-Jul-18	Charcoal Fabric	Music	1

## Description of each attribute

- Rating: rating out of 5
- Date: date of purchase
- Variation: which model they've purchased
- Verified Reviews: Feedback from the customer
- Feedback: 0 (negative) or 1 (positive)

## Learning Methodology/Algorithm

- Random Forest
- K fold cross-validation
- XGBoost
- Decision Tree Classifier