

Tutorial 4 – Sentiment Analysis

A new robot vacuum cleaner has been designed, manufactured and released. After the first month, the manufacturers would like to examine how satisfied/dissatisfied its customers are.



They managed to scrape a couple of reviews from their Amazon product page, and stored them in a text file, as follows:

We've a golden retriever which sheds a lot of hair. This robot vacuum leaves the floor spotless and even docks itself to recharge when it's finished. Highly recommended.

Elegant and efficient. Lightweight, thoroughly cleans.
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It does an amazing job on laminate and carpet - so much so that he's taken over from me needing an actual cleaner! I love how easy the app is to use as well so I can check how he's getting on and how much he's done.

The product has been perfect, the app makes out your house and it effectively clears everything up while you're out. Couldn't recommend this enough. The only thing to keep in mind is that you have to keep your cables out of the way if you want it to automatically clean your house when you're not in.
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Seems to just self discharge after charging if you don't use it. I will generally avoid.
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Does not do a great job can't find its charging base.
It took me too long to set it up and change my Wi-Fi frequency. I had problems with charging it as well.
It gets stuck all the time and you have to go and move it, which defeats the object of it being able to work unaided. Sometimes when I turn it on it gets stuck within the first minute. Wish I hadn't bought it.

The text file, called “*reviews.txt*” has been provided to you.

Create a new Python script and carry out the following tasks to complete sentiment analysis on these reviews.

1. Research how to read in a text file from a python script, into an array of string (each line in the text file, thus each review, will go in a separate array location)
2. Use the sentiment analysis code we covered during the lecture to apply it on each review, one by one (hint: you need a loop)
3. For each review, output “POSITIVE” if the score is above 0, and “NEGATIVE” if it is below zero.
4. Finally, output an overall score for the product, which depends on all the reviews. Calculate this by finding the percentage of Positive reviews.

ANSWER SHOULD BE: **50%**