

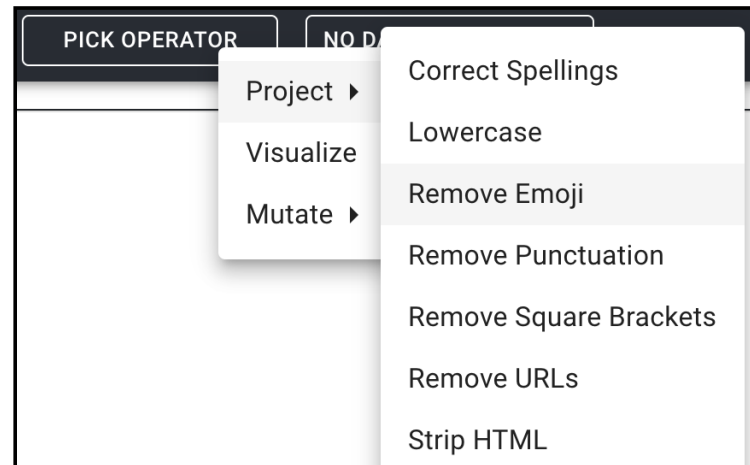
```
In[1]: # Load dataset and select the "review" column
data = VTA("reviews.csv", started=True)
col = data.get_column("review")
```

```
In[2]: # clean column content
col.project().strip_html()
col.project().remove_emoji()
col.project().lowercase()
col.project().correct_spellings()
```

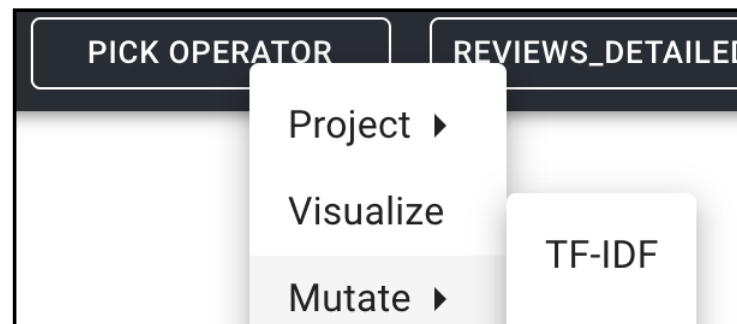
```
In[3]: # create a new column with review tf-idf
new_col = col.mutate().tf_idf()
col2 = data.get_column(new_col)
```

```
In[4]: # access metadata to visualize top words
col2.aggregate().word_scores("feature_labels")
col2.visualize("barchart", "top_scores")
```

(a) VITAL commands



(b) Cleaning operations



(c) Featurization operations