

Testing the model

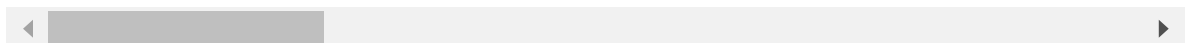
```
In [ ]: import pandas as pd
import pickle
import csv
import numpy as np

filename = 'Prudential_Life_Insurance_test.csv'
```

```
In [ ]: df_test = pd.read_csv(filename)
display(df_test.head(10))
id_col = df_test['Id'].values
```

	Id	Product_Info_1	Product_Info_2	Product_Info_3	Product_Info_4	Product_Info_5	Pr
0	1	1	D3	26	0.487179	2	
1	3	1	A2	26	0.076923	2	
2	4	1	D3	26	0.144667	2	
3	9	1	A1	26	0.151709	2	
4	12	1	A1	26	0.076923	2	
5	13	1	D3	26	0.230769	2	
6	21	1	A3	26	1.000000	2	
7	28	1	D4	26	0.256410	2	
8	30	1	D3	26	0.076923	2	
9	36	1	A3	26	0.076923	2	

10 rows × 127 columns



The test set is preprocessed as the train set, to prepare it for the model.

```
In [ ]: df_test['Medical_History_2'] = df_test['Medical_History_2'].astype('float64')
for c in df_test.columns:
    if df_test[c].dtype == 'int64' or df_test[c].dtype == 'object':
        df_test[c] = df_test[c].astype('category')
```

```
In [ ]: model = pickle.load(open('model.save', 'rb'))
results = model.predict(df_test.drop(columns='Id')) + np.ones(shape = df_test.sh
```

Creation of the submission file

```
In [ ]: df_dict = {'Id': id_col, 'Response': results}
results_df = pd.DataFrame(df_dict)

file_path = 'Prudential_Life_insurance_results.csv'
results_df.to_csv(file_path, index=False, quoting=csv.QUOTE_NONNUMERIC)
```