a01_2

October 3, 2025

```
[1]: # ---
     # jupyter:
     #   jupytext:
     #     text_representation:
     #       extension: .py
     #       format_name: percent
     #       format_version: '1.3'
     #       jupytext_version: 1.16.7
     #   kernelspec:
     #     display_name: Python (ML25_assignments)
     #     language: python
     #     name: ml25
     # ---

     # %% [markdown]
     # # 2 Prediction
```

```
[2]: # %%
     # %load_ext autoreload
     # %autoreload 2
     from a01_helper import *
     from a01_functions import nb_train, nb_predict
```

```
[3]: # Test your code
     model = nb_train(Xex, yex, alpha=2)
     nb_predict(model, Xex)
     # This should produce:
     # {'logprob': array([-0.41925843, -0.55388511, -0.68309684, -0.29804486]),
     #  'yhat': array([0, 1, 2, 0], dtype=int64)}
```

```
[3]: {'yhat': array([0, 1, 2, 0]),
      'logprob': array([-0.41925843, -0.55388511, -0.68309684, -0.29804486])}
```