Data Scientist Technical Assignment

Instructions

In this test you are provided with a classification dataset.
1) write and train a classifier that aims to maximise out-of-sample accuracy. Use "input_train.csv" and "label_train.csv" to train your classifier and make your predictions running your classifier on "input_test.csv".

2) I will give you some hints on how the dataset is made:
   a. take a sheet of paper and draw a bullseye.
   b. fold the piece of paper, creating a spiral.
   c. flood the dataset in 10 dimensions.

Can you use ML techniques to reverse the data generation process?
Can you display step a. visually?

Write and submit a short report (max 2 pages) in which you briefly explain how you made 1) and 2). Which techniques did you use? Which analysis did you do to reach the objective?
If you completed 2), add to the report a scatterplot for step a.
Pair your submission with the source code that you used.
To submit the predictions made in 1), use a CSV file named "NAME_SURNAME_label_test.csv".

Make sure that the format is the same as "label_train.csv".