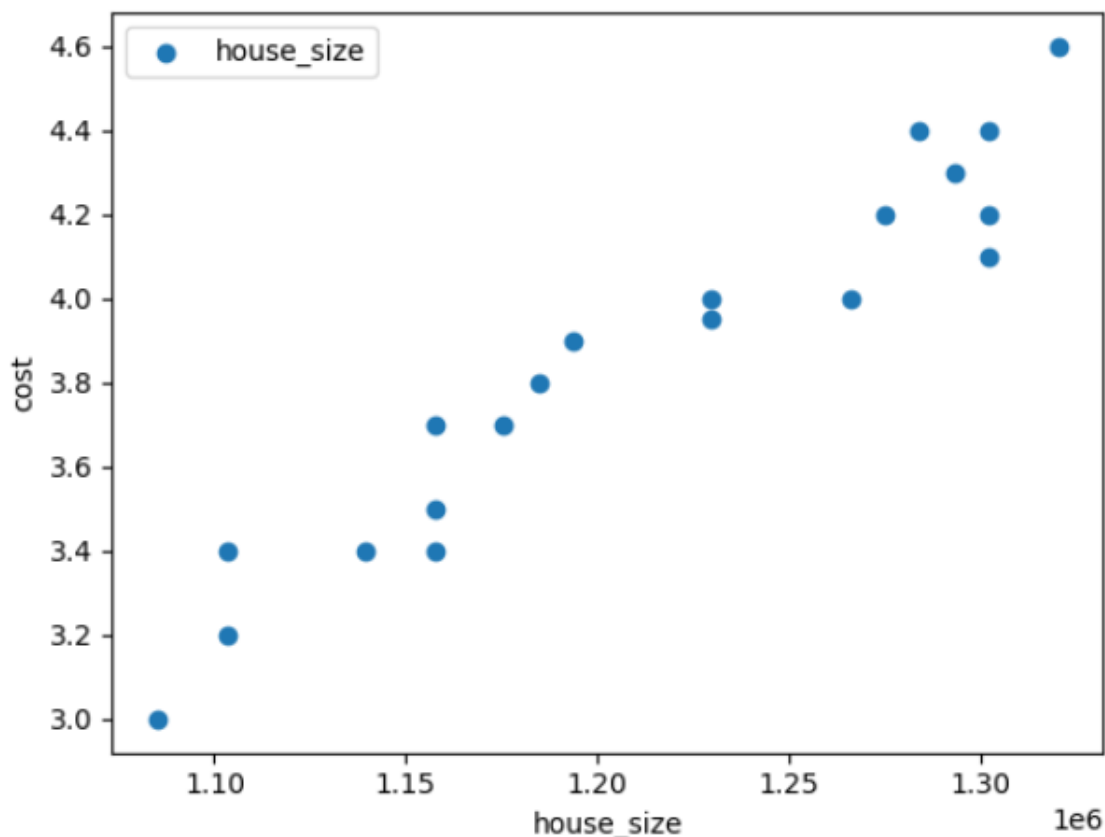


# LAB Logbook

## Lab 1

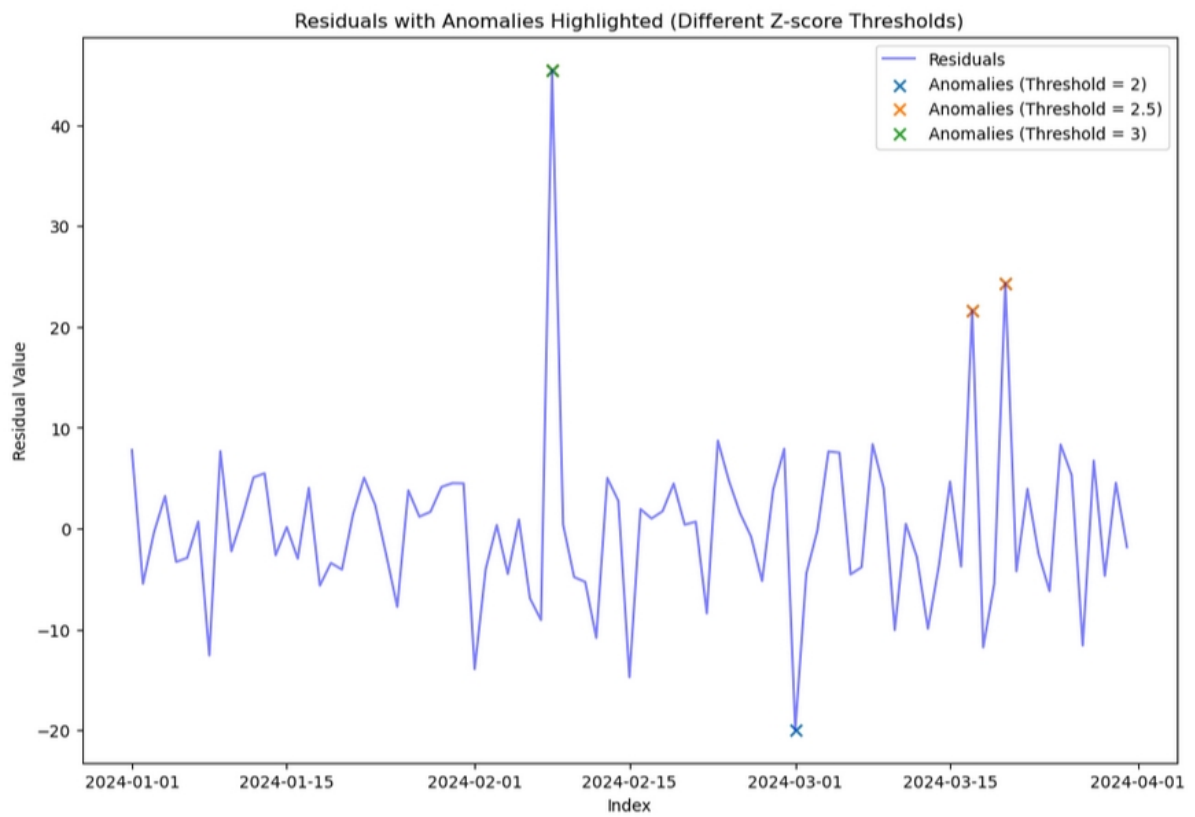
- **Series:** A Pandas Series is a one-dimensional array-like object that can hold any data type and has an associated index for easy labelling and access.
- **DataFrame:** A DataFrame is a two-dimensional, tabular data structure with rows and columns, making it ideal for storing and manipulating datasets.
- **Index:** An Index in Pandas is an immutable array used for labelling and aligning data in Series or DataFrames, enabling efficient data retrieval and manipulation.
- **Categorical:** The Categorical type in Pandas allows for efficient storage and manipulation of data with a fixed number of possible values, making it ideal for handling categorical data.
- **DatetimeIndex:** A DatetimeIndex is a specialised index in Pandas for handling time series data, allowing for fast date-based indexing and resampling operations.

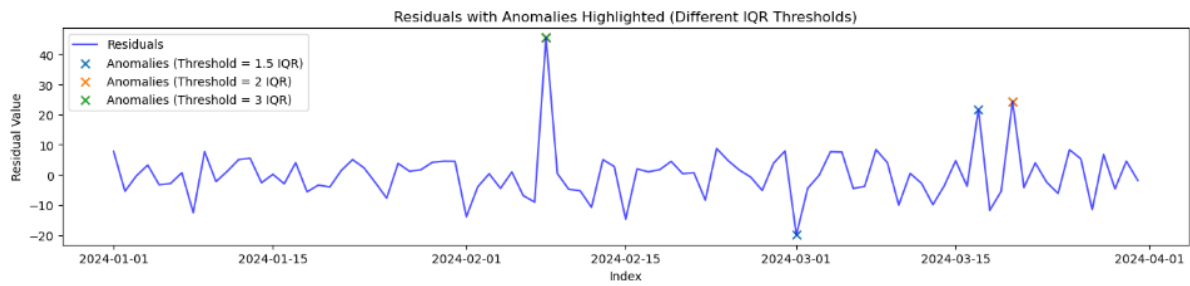
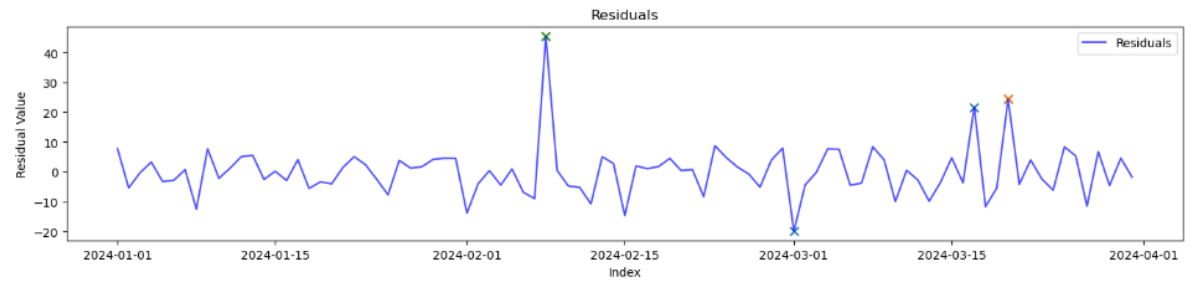
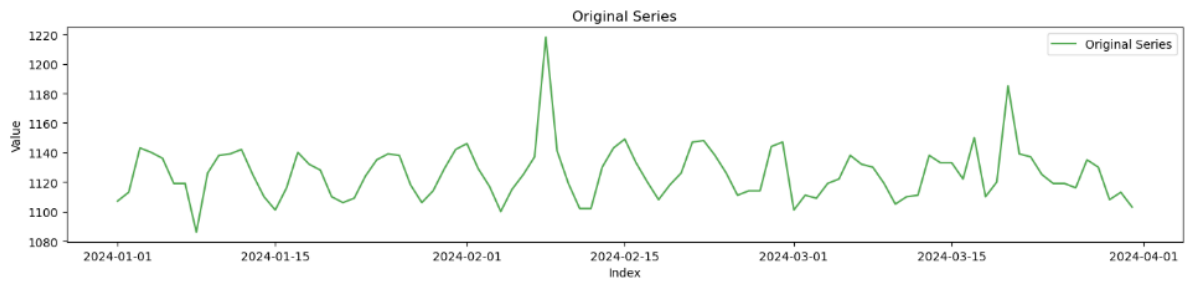
## Lab 2



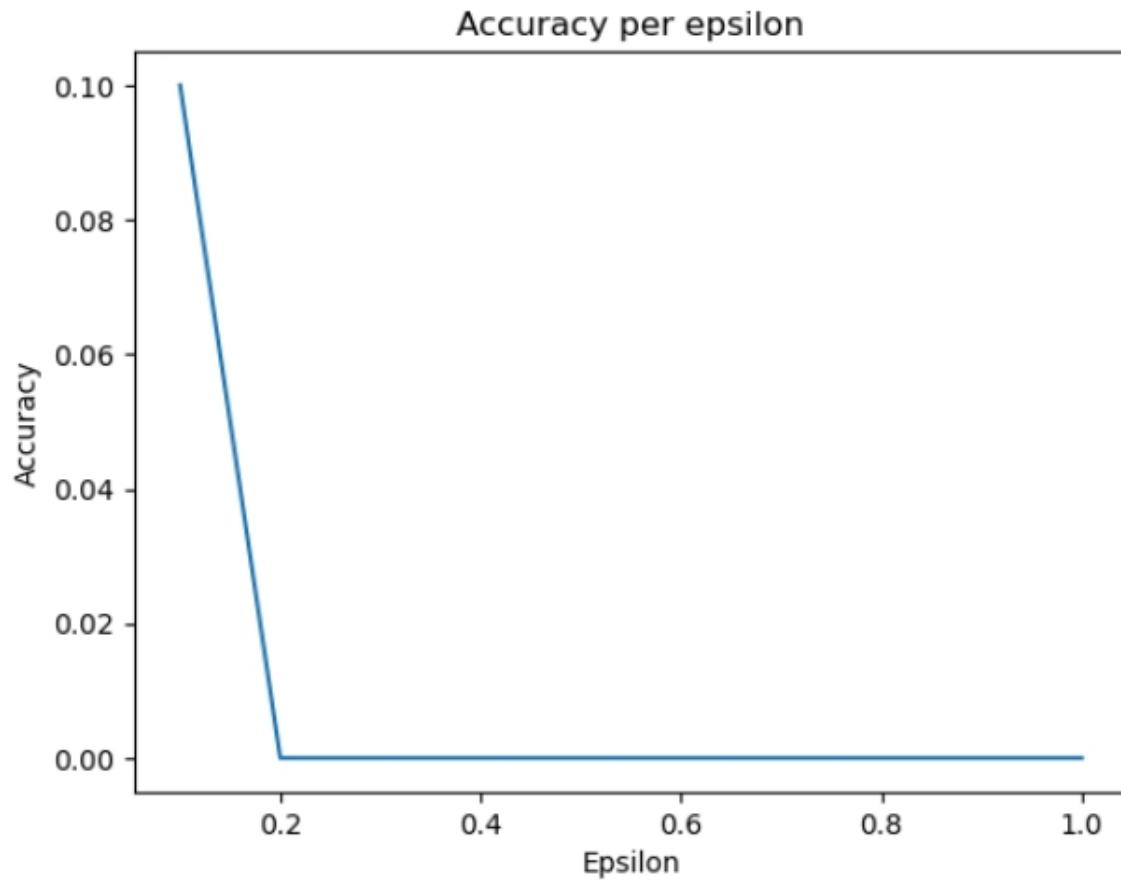
Price guess for size of  $SID \cdot 0.75 = 4.9$

## Lab 3





## Lab 4



The higher the epsilon value, the less accuracy there is. The model is very weak against adversarial attacks.

**313/313** ————— **1s** 4ms/step - accuracy: 0.9769 - loss: 0.1016  
Test Accuracy Original: 0.9798

---

**313/313** ————— **1s** 4ms/step - accuracy: 0.1027 - loss: 123255.7109  
Test Accuracy poisoned: 0.1028

## Lab 5

Lab 6

Lab 7

Lab 8

Lab 9

Lab 10

Lab 11

Lab 12