Lab 1 Report

EE 385T Intro to Machine Learning

# Code

# Questions

1. Quadratic Dataset
   1. Performance Metrics

|  |  |  |
| --- | --- | --- |
| Regression Type | Mean Absolute Error (MAE) | Correlation Coefficient (r) |
| Linear | 1.3120 | 0.9757 |
| Ridge | 1.3124 | 0.9757 |
| Lasso | 1.5054 | 0.9757 |
| Polynomial | 0.7543 | 0.9917 |

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1. Custom Dataset: Red Wine Quality
   1. Performance Metrics

|  |  |  |
| --- | --- | --- |
| Regression Type | Mean Absolute Error (MAE) | Correlation Coefficient (r) |
| Linear | 0.5035 | 0.6389 |
| Ridge | 0.5058 | 0.6358 |
| Lasso | 0.6610 | 0.1238 |
| Polynomial | 0.4948 | 0.6460 |

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1. Hyper-Parameters
2. When