

---

## Machine Learning Assignment 2

Maysoon Helmy Abdelrahman Aly Shaban

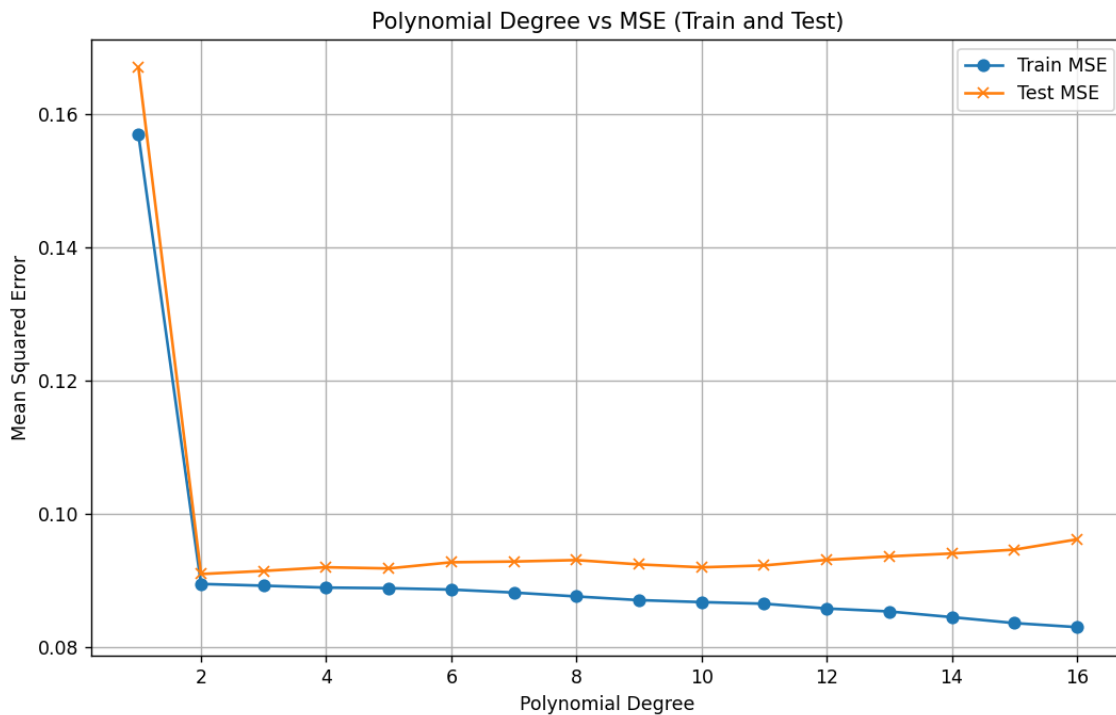
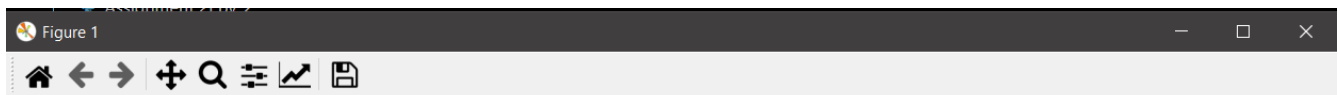
ميسون حلمي عبدالرحمن علي شعبان

ID: 2022170629

Department: Scientific Computing (SC)

UMS Level: 3

---



### **Conclusion:**

The output demonstrates that a 2nd-degree polynomial regression offers the best balance between model complexity and generalization, with higher degrees reducing training error but worsening test performance, suggesting overfitting.