

## Limitations of Linear Regression

- ✖ Cannot handle non-linear decision boundaries naturally
- ✖ Assumes continuous output (not suitable for classification)
- ✖ Sensitive to outliers without robust variants
- ✖ Feature engineering required for complex patterns
- ✖ Interpretation difficult with many interaction terms
- ✖ Limited for categorical outcomes

## Why We Need Classification Algorithms



Critical Question:  
**What if output is categorical (yes/no)?**

