

MODULE 1: INTRODUCTION TO PROGRAMMING

Polymorphism





Yesterday

- What is an example of inheritance?
- What is a superclass or base class?
- What is a subclass?

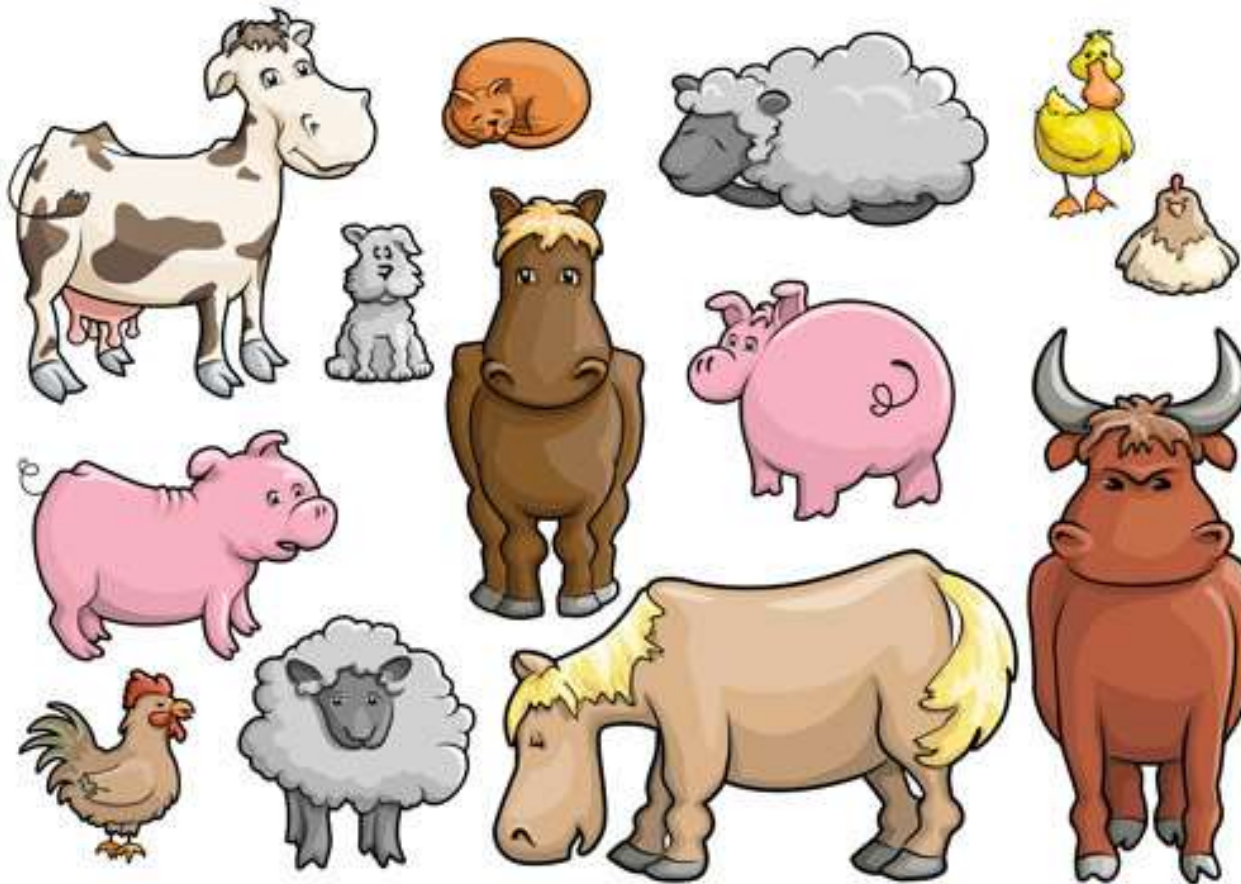
Polymorphism

- Poly – Many
- Morph – Change or shape

In object-oriented programming, polymorphism is the idea that something can be assigned a different meaning or usage based on the context for which it is referred. This specifically allows variables and objects to take on more than one form.



Polymorphism through Inheritance



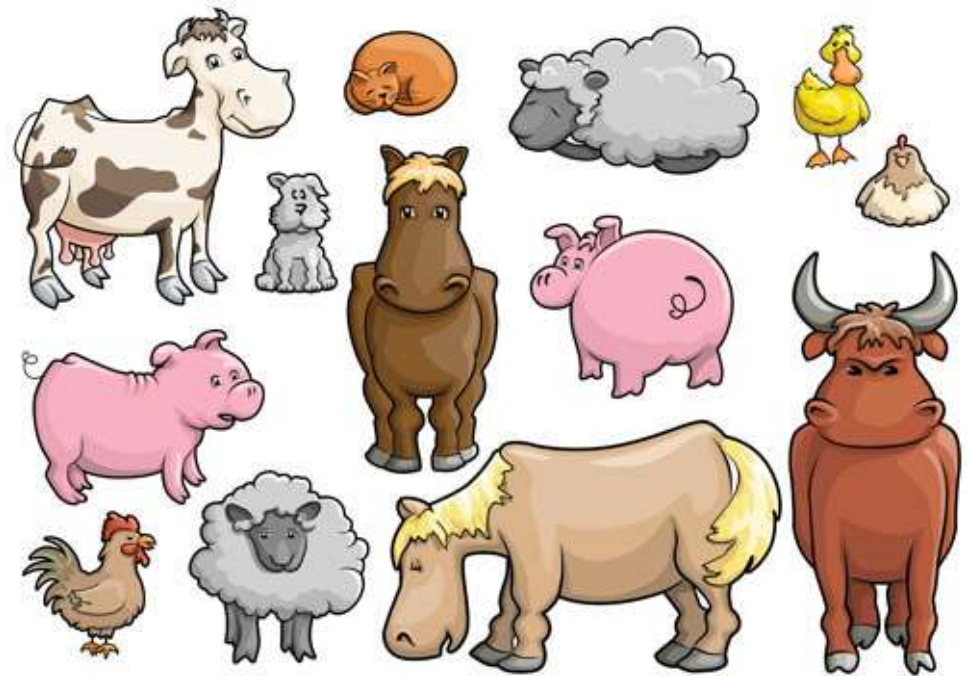
LET'S CODE!



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Polymorphism through Interfaces





Interface

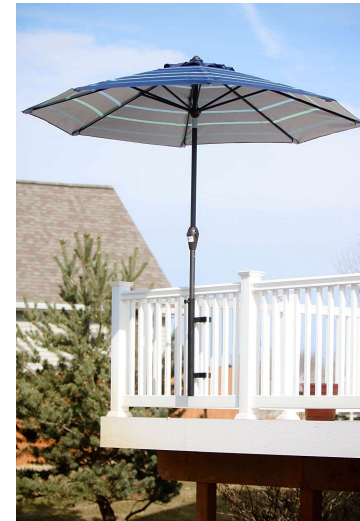
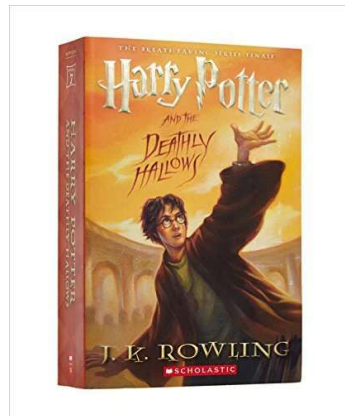
- Define ***what something can do*** or ***how it can be used***, but ***not how it does it***.
- An interface is a contract that defines what methods a user of the interface can expect
 - What are the methods I can rely on being there for this object?
- Cannot be instantiated
- Multiple Interfaces are allowed for a single object
- if Class A implements interface B, then A "is-a" B
 - And so are all its children

LET'S CODE!



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Real World Example



WHAT QUESTIONS DO
YOU HAVE?



Reading for tonight: **Inheritance**

