

**POLYMORPHISM**

# POLYMORPHISM

- "having many forms"
- allows class instance to behave like another ancestor class
- **polymorphic reference** - reference variable that can refer to different objects at different points in time

# POLYMORPHISM - METHOD BINDING

- Specific method invoked can vary from one invocation to the next
- Depends on what instance the reference currently points to

# EXAMPLES

Consider classes:

- `Employee` - **abstract**
- `StudentWorker` - **extends** `Employee`
- `Faculty` - **extends** `Employee`

# DUCK TYPING

- Polymorphism matters more in languages with strict typing
- Python has duck typing
  - duck test: "if it walks like a duck and quacks like a duck it's a duck"
  - don't need specific types