

## Lab 06

### IMPORTANT

Include the lab number and student name in comments at the top of your cpp file.

### INSTRUCTIONS

Define a class named Pet with:

- a private integer to store the age of the pet
- a protected string to store the name of the pet
- a getter and a setter function for the private variable
- a constructor with 2 parameters to populate the value of the private and protected variables

Define a Cat class that is a child class of the Pet class with:

- a private string to store what the cat says
- a public function to display the cat's name and age, as well as what the cat says
- a constructor with 2 parameters to populate the name and age
  - the constructor also assigns the value of *Meow* to the Cat private variable

Define a Dog class that is a child of the Pet class with:

- a private string to store what the dog says
- a public function to display the dog's name and age, as well as what the dog says
- a constructor with 2 parameters to populate the name and age
  - the constructor also assigns the value of *Woof!* to the Dog private variable

In the main function:

- Instantiate a cat named Mittens who is 2 years old
- Instantiate another cat named Whiskers who is 3 years old
- Instantiate a dog named Fido who is 6 years old
- Instantiate another dog named Duke who is 4 years old
- Call your display function for each of your 4 pets

Note: Do not add variables or functions not listed in the above instructions.

See sample output below.

Save your cpp file as lab06.txt and submit lab06.txt on Canvas.

Pet constructor  
Cat constructor  
Mittens is 2 years old and says Meow

Pet constructor  
Cat constructor  
Whiskers is 3 years old and says Meow

Pet constructor  
Dog constructor  
Fido is 6 years old and says Woof!

Pet constructor  
Dog constructor  
Duke is 4 years old and says Woof!