

## Lab 10

### *Abstract classes – virtual functions*

#### IMPORTANT

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

#### INSTRUCTIONS

Update lab 8

#### Vehicle class

Ensure that the Vehicle class is an abstract class:

Add a true virtual integer function named getPrice with no parameters.

#### Car class

Add a private integer named price.

Add getter and setter functions for price, i.e. getPrice and setPrice.

Update the constructor to include price.

Update the display function to include price.

#### SUV class

Update the constructor to include price.

Update the display function to include price.

#### Compact class

Update the constructor to include price.

#### Main function

Add amounts to the instantiation of your objects.

See sample output below.

Save your cpp file as lab10.txt and submit lab10.txt on Canvas.

Constructor: Vehicle  
Constructor: Car  
Constructor: SUV

Constructor: Vehicle  
Constructor: Car  
Constructor: SUV

Constructor: Vehicle  
Constructor: Car  
Constructor: Compact

Constructor: Vehicle  
Constructor: Car  
Constructor: Compact

Jeep is an SUV that costs 35000. It gets 28 mpg, and says Honk honk.  
Humvee is an SUV that costs 42000. It gets 14 mpg, and says Ahooga!  
Civic is not a truck that costs 22000. It gets 36 mpg, and says Beep beep.  
Road Runner is not a truck that costs 19500. It gets 34 mpg, and says Meep meep!