

Design a class Vehicle which will have:

- 1) **VIN** (vehicle ID number; a pointer to an integer)
- 2) a **gas mileage** (pointer to a double)
- 3) a **display function**
- 4) **accessors and mutators for the members.**
- 5) A function calls **calcGasUsed** which receives (as a parameter) the number of miles driven and returns the number of gallons burned.
- 6) A **drive** function which generates a random number (between 1 and 25) and calls **calcGasUsed** and prints the result

Design a class SUV which derives from vehicle but adds the following:

- 1) **fourWDStatus** (pointer to a Boolean; Four Wheel Drive status)
- 2) **fourWDGasMileage** (pointer to a double).
- 3) a new **display** function (please call the base display also)
- 4) **accessors** and **mutators** for the new members
- 5) a new **calcGasUsed function** which accounts for whether or not the vehicle is in 4X4 mode

In Main, create an array of three cars, two of which will be SUVs. Put one of the SUVs in Four Wheel Drive mode and drive all three cars.