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Project5

The purpose of project 5 was to help us learn inheritance, overloaded operators, and const values. The design for my project was as the project had asked. The header files needed to be complentary to the source file so that there weren’t any problems. First both I set up both classes with the car class being inherited by the vehicle. Then I set up all the prototypes for both classes. The default constructor set everything uninitialized and would increment the s\_idgen. Then I would move on to the parameterized which took in the lla and moved it into the m\_lla using a set function that I had made. I would then initialize the m\_vin to the int that they gave me. The insertion operator is called whenever there is and operator prints out the data that corresponds to it. The copy constructor will copy it and make a new car with the sidgen. The assignment operator will take the first vehicle and give it the lla values. I would do mostly the same for the car, which has the additional license plates.

Some problems that I had were the fact that the m\_vin is a const int and not a regular one. So it took me a while to realize that you need to initialize it in a special way. Then when I need to set the vin in the car class I had realized I needed to call the parameterized vehicle constructor to move the values from the car to the vehicle. If I were to change anything, I would go back and use some of the cstring functions. I haven’t been using them so I actually didn’t know how to use them and did it the hard way instead.

When my code outputs, I see that I get my default constructor and everything is set to 0. My insettion operator is called but nothing had been initialized so it is also 0. Then my parameterized is called and it gives values to the m\_lla and m\_vin, When I copy it I pass it the s\_idgen so I get a new vehicle that is #3. Then my assignement operator prints out my first car and gives it the m\_lla values. Then it moves on to the car class. Again it calls the default constructor for car and should set everything to zero., but give the m\_vin the s\_idgen value. My insertion operator is called and nothing is initialized so it prints out zeros. When my parameterized constructor is called I call the vehicle parameterized constructor and sets the values and prints them out. The copy construcot makes a new car witht the s\_idgen which is at 8 now, and sets all the values to the same as before. The assingement operator gives the m\_lla values and m\_plates to the first car that was initialized and prints it out. Then at the end it prints out all the destructors for all the new vehicles and cars made.