

```
#include <iomanip> //for floats
```

```
#include <iostream>
```

```
#include <string>
```

```
using namespace std;
```

```
// Author: Brianna Sobriano, Kenry Yu
```

```
// Demo time: 5:20 PM
```

```
// Date: March 3, 2022
```

```
//
```

```
struct Car {
```

```
    string make;
```

```
    string model;
```

```
    int manufacture_year;
```

```
    string color;
```

```
    int curr_mileage;
```

```
    float mpg;
```

```
    int sale_price;
```

```
// default constructor, gave values because if not the compiler would try to
```

```
// give it values
```

```
Car() {
```

```
    make = "Bogus";
```

```
    model = "REEEEEEE";
```

```
    manufacture_year = 2022;
```

```
    color = "Invisible";
```

```
    curr_mileage = 0;
```

```
    mpg = 0;
```

```
    sale_price = 0;
```

```
}
```

```
// Overload constructor, assign parameter to each member
```

```
Car(string ma, string mo, int year, string co, int mile, float _mpg,  
    int price) {  
    make = ma;  
    model = mo;  
    manufacture_year = year;  
    color = co;  
    curr_mileage = mile;  
    mpg = _mpg;  
    sale_price = price;  
}
```

```
// display function that display all the information
```

```
void display() {  
    cout << make << " " << model << "\nColor: " << color  
        << "\nManufacture year: " << manufacture_year  
        << "\nCurrent mileage: " << curr_mileage  
        << "\nMile per gallon: " << fixed << setprecision(1) << mpg  
        << "\nSale price: $" << sale_price << endl;  
}  
};
```

```
Car carLot[5] = {{"Honda", "Accord", 2021, "White", 20349, 30, 20300},  
                {"Mercedes", "AMG", 2022, "Navy", 9432, 20, 60000},  
                {"Toyota", "Camery", 2018, "Black", 45678, 28, 18500},  
                {"Dodge", "Challenge", 2016, "Green", 40309, 18, 16000},  
                {"Jeep", "Cheeroke", 2022, "Red", 4, 19, 40720}};
```

```
void displayCars(Car carLot[5]) {  
    for (int i = 0; i < 5; i++) {  
        carLot[i].display();  
        cout << endl;  
    }  
}
```

```
int main() {  
    displayCars(carLot);  
    return 0;  
}
```

```
> make -s
> ./main
Honda Accord
Color: White
Manufacture year: 2021
Current mileage: 20349
Mile per gallon: 30.0
Sale price: $20300
```

```
Mercedies AMG
Color: Navy
Manufacture year: 2022
Current mileage: 9432
Mile per gallon: 20.0
Sale price: $60000
```

```
Toyota Camery
Color: Black
Manufacture year: 2018
Current mileage: 45678
Mile per gallon: 28.0
Sale price: $18500
```

```
Dodge Challenge
Color: Green
Manufacture year: 2016
Current mileage: 40309
Mile per gallon: 18.0
Sale price: $16000
```

```
Jeep Cheeroke
Color: Red
Manufacture year: 2022
Current mileage: 4
Mile per gallon: 19.0
Sale price: $40720
```

```
> []
```

```
}
```