CODE:

```cpp
#include<iostream>
using namespace std;

class Vehicle {
public:
    int m, p;
    Vehicle() {

    }
    Vehicle(int mileage, int price) {
        m = mileage;
        p = price;
        cout << "The mileage is: " << m << endl;
        cout << "The price is: " << p << endl;
    }
};

class Car : public Vehicle {
public:
    int w, s;
    string f;
    Car() {}
    Car(int mileage, int price, int warranty, int seats, string fuel)
        : Vehicle(mileage, price), w(warranty), s(seats), f(fuel) {
        cout << "The warranty is: " << w << endl;
        cout << "The seat capacity is: " << s << endl;
        cout << "The fuel capacity is: " << f << endl;
```

```cpp
    }
};


class Bike : public Vehicle {
public:
    int g, c;
    string w;
    Bike() {}
    Bike(int mileage, int price, int gear, int cylinder, string wheelType)
        : Vehicle(mileage, price), g(gear), c(cylinder), w(wheelType) {
        cout << "The number of gears are: " << g << endl;
        cout << "The number of cylinders are: " << c << endl;
        cout << "The wheel type is: " << w << endl;
    }
};


class Audi : public Car {
public:
    int x;
    Audi(int mileage, int price, int warranty, int seats, string fuel, int modelNo)
        : Car(mileage, price, warranty, seats, fuel), x(modelNo) {
        cout << "The model no. is: " << x << endl;
    }
};


class Ford : public Car {
public:
    int x;
```

```cpp
    Ford(int mileage, int price, int warranty, int seats, string fuel, int modelNo)
        : Car(mileage, price, warranty, seats, fuel), x(modelNo) {
        cout << "The model no. is: " << x << endl;
    }
};


class Bajaj : public Bike {
public:
    int x;
    Bajaj(int mileage, int price, int gear, int cylinder, int modelNo)
        : Bike(mileage, price, gear, cylinder, "Alloy"), x(modelNo) {
        cout << "The model no. is: " << x << endl;
    }
};


class TVS : public Bike {
public:
    int x;
    TVS(int mileage, int price, int gear, int cylinder, int modelNo)
        : Bike(mileage, price, gear, cylinder, "Spoke"), x(modelNo) {
        cout << "The model no. is: " << x << endl;
    }
};


int main() {
    cout << "Audi" << endl;
    Audi d1(25, 500000, 30, 5, "diesel", 3);
```

```cpp
    cout << "Ford" << endl;

    Ford d2(20, 400000, 25, 7, "petrol", 2);


    cout << "Bajaj" << endl;

    Bajaj d3(60, 25000, 4, 2, 5);


    cout << "TVS" << endl;

    TVS d4(50, 20000, 3, 1, 6);


    return 0;

}
```

OUTPUT:

Audi

The mileage is: 25

The price is: 500000

The warranty is: 30

The seat capacity is: 5

The fuel capacity is: diesel

The model no. is: 3

Ford

The mileage is: 20

The price is: 400000

The warranty is: 25

The seat capacity is: 7

The fuel capacity is: petrol

The model no. is: 2

Bajaj

The mileage is: 60

The price is: 25000

The number of gears are: 4

The number of cylinders are: 2

The wheel type is: Alloy

The model no. is: 5

TVS

The mileage is: 50

The price is: 20000

The number of gears are: 3

The number of cylinders are: 1

The wheel type is: Spoke

The model no. is: 6


[Program finished]