

```
#include<iostream>

using namespace std;

class Vehicle{
    public:
    string brand;
    string model;
    int year;
    Vehicle(string b,string m,int y){
        brand=b;
        model=m;
        year=y;
    }
    void displayInfo(){
        cout<<"Brand: "<<brand<<endl;
        cout<<"Model: "<<model<<endl;
        cout<<"Year: "<<year<<endl;
    }
    virtual void displayVehicleType(){
        cout<<"Vehicle Type: Base Vehicle"<<endl;
    }
};

class Car:public Vehicle{
    public:
    string fuelType;
    Car(string b,string m,int y,string ft):Vehicle(b,m,y){
        fuelType=ft;
    }
    void displayInfo(){
        Vehicle::displayInfo();
        cout<<"Fuel Type: "<<fuelType<<endl;
    }
    void displayVehicleType(){
        cout<<"Vehicle Type: Car"<<endl;
    }
    void displayBrand(){
        cout<<"Brand: "<<brand<<endl;
```

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    }  
};  
class Bike:public Vehicle{  
    public:  
    int engineCC;  
    Bike(string b,string m,int y,int cc):Vehicle(b,m,y){  
        engineCC=cc;  
    }  
    void displayInfo(){  
        Vehicle::displayInfo();  
        cout<<"Engine CC: "<<engineCC<<endl;  
    }  
    void displayVehicleType(){  
        cout<<"Vehicle Type: Bike"<<endl;  
    }  
};  
int main(){  
    Car c("Maruti","Swift",2018,"Petrol");  
    Bike b("Honda","Activa",2019,125);  
    c.displayInfo();  
    b.displayInfo();  
    return 0;  
};
```

```
[Running] cd "d:\RS\ARC\Practise_Code\ARC_Lab\" && g++ basicplusplus.cpp -o basicplusplus && "d:\RS\ARC\Practise_Code\ARC_Lab\"basicplusplus  
Brand: Maruti  
Model: Swift  
Year: 2018  
Fuel Type: Petrol  
Brand: Honda  
Model: Activa  
Year: 2019  
Engine CC: 125  
[Done] exited with code=0 in 1.249 seconds
```

```

main.cpp  empl.cpp
File Edit View

#include<iostream>
using namespace std;
class Vehicle{
public:
    string brand;
    string model;
    int year;
    Vehicle(string b,string m,int y){
        brand=b;
        model=m;
        year=y;
    }
    void displayInfo(){
        cout<<"Brand: "<<brand<<endl;
        cout<<"Model: "<<model<<endl;
        cout<<"Year: "<<year<<endl;
    }
    virtual void displayVehicleType(){
        cout<<"Vehicle Type: Base Vehicle"<<endl;
    }
};
class Car:public Vehicle{
public:
    string fuelType;
    Car(string b,string m,int y,string ft):Vehicle(b,m,y){
        fuelType=ft;
    }
    void displayInfo(){
        Vehicle::displayInfo();
        cout<<"Fuel Type: "<<fuelType<<endl;
    }
    void displayVehicleType(){
        cout<<"Vehicle Type: Car"<<endl;
    }
};

```

```

main.cpp  empl.cpp
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Car(string b,string m,int y,string ft):Vehicle(b,m,y){
    fuelType=ft;
}
void displayInfo(){
    Vehicle::displayInfo();
    cout<<"Fuel Type: "<<fuelType<<endl;
}
void displayVehicleType(){
    cout<<"Vehicle Type: Car"<<endl;
}
void displayBrand(){
    cout<<"Brand: "<<brand<<endl;
}
};
class Bike:public Vehicle{
public:
    int engineCC;
    Bike(string b,string m,int y,int cc):Vehicle(b,m,y){
        engineCC=cc;
    }
    void displayInfo(){
        Vehicle::displayInfo();
        cout<<"Engine CC: "<<engineCC<<endl;
    }
    void displayVehicleType(){
        cout<<"Vehicle Type: Bike"<<endl;
    }
}
};
int main(){
    Car c("Maruti","Swift",2018,"Petrol");
    Bike b("Honda","Activa",2019,125);
    c.displayInfo();
    b.displayInfo();
    return 0;
};

```