

Q4. Structure Car

The structure Car is declared as follows:

```
struct Car
{
    string carMake;
    string carModel;
    int yearModel;
    double cost;
};
```

(1) Write a definition statement that defines a Car structure variable initialized with the following data:

- a. Make: Ford
- b. Model: Mustang
- c. Year Model: 1968
- d. Cost: \$20,000

Answer:

```
Car fordMustang = {"Ford", "Mustang", 1968, 20000};
```

(2) Define an array of 25 of the Car structure variables.

Answer:

```
Car carArray[25];
```

(3) Define an array of 35 of the Car structure variables. Initialize the first three elements with the following data:

Make Model Year Cost

Ford Taurus 1997 \$21,000

Honda Accord 1992 \$11,000

Lamborghini Countach 1997 \$200,000

Answer:

```
Car carArray[35];
carArray[0] = {"Ford", "Taurus", 1997, 21000};
carArray[1] = {"Honda", "Accord", 1992, 11000};
carArray[2] = {"Lamborghini", "Countach", 1997, 200000};
```

(4) Write a loop that will step through the array you defined in (3), displaying the contents of each element.

Answer:

```
for (int i = 0; i < 35; i++) {
    cout << "Car " << (i + 1) << ":\n";
    cout << "Make: " << carArray[i].carMake << endl;
    cout << "Model: " << carArray[i].carModel << endl;
    cout << "Year Model: " << carArray[i].yearModel << endl;
    cout << "Cost: $" << carArray[i].cost << endl;
}
```