

### LEVEL III – JS:

#### JavaScript Basics - Problems on Classes

1. Define a car object using plain literal object.

define 2 properties (brand, speed) and 3 methods (accelerate, brake, describe)

Sample Input:

```
// Try methods
console.log(car.status());
car.accelerate(50);
console.log(car.status());
car.accelerate(100);
console.log(car.status());
car.brake(25);
console.log(car.status());
```

Sample Output:

Ford running at 0 km/h

Ford running at 50 km/h

Ford running at 150 km/h

Ford running at 125 km/h

Ferrari running at 200 km/h

Ferrari running at 100 km/h

>

2. Redefine the previous problem statement with classes and add the given attributes and methods.

Attributes:

Brand, speed , motion

### Methods:

Accelerate , brake , status , check\_motion , emergency\_brake

Check\_motion method : to check whether the vehicle is moving or not

Emergency\_brake method: to change the speed to 0.

### Sample Input:

```
console.log(car.status());  
car.accelerate(50);  
console.log(car.status());  
car.accelerate(100);  
console.log(car.status());  
car.brake(20);  
console.log(car.status());  
car.brake(200);  
console.log(car.status());
```

### Sample Output:

```
Ford Fiesta running at 0 km/h; status check: The car is not moving (initial condition)  
Ford Fiesta running at 50 km/h; status check: The car is moving  
Ford Fiesta running at 150 km/h; status check: The car is moving  
Ford Fiesta running at 130 km/h; status check: The car is moving  
Ford Fiesta running at 0 km/h; status check: The car has stopped  
Ferrari Whatever Model running at 0 km/h; status check: The car is not moving (initial condition)  
Ferrari Whatever Model running at 200 km/h; status check: The car is moving  
Ferrari Whatever Model running at 100 km/h; status check: The car is moving  
Ferrari Whatever Model running at 0 km/h; status check: The car has stopped
```