

BHARATH KUMAR G R | Batch-A4 | Assignment-14

The screenshot displays an IDE with the following components:

- Package Explorer:** Shows a project structure with packages like `AccessModifiers`, `Basic_Programs`, `Blocks`, `ConstructorChainnig`, `Constructors`, `DataTypes`, `Encapsulation`, `GeeksforGeeks`, `Inheritance`, `Looping_Statements`, `MethodorFunctions`, `MethodOverriding`, `Mock_Test`, `NumberSeries`, `OOp`, `oops`, `Operators`, `PassByValue`, `Scanner`, `Static`, `TernaryOperator`, `TypeCasting`, and `UnaryOperator`. The `com.Primitive` package is expanded, showing `Demo.java`, `Runner.java`, `TestVehicle.java`, and `module-info.java`.
- Source Editor:** Displays the code for `TestVehicle.java`. The code defines a `Vehicle` class with a `Brand` attribute and a `Start()` method. A `Car` class extends `Vehicle`, adding a `Fueal` attribute and a `Stop()` method. The `TestVehicle` class contains a `main` method that demonstrates up-casting (creating a `Vehicle` object from a `Car` object) and down-casting (creating a `Car` object from a `Vehicle` object).
- Console:** Shows the output of the program, which is terminated. The output is as follows:

```
<terminated> TestVehicle
-----
BMW
Vechicle started
-----
BMW indian oil
Vechicle started
Car Stopped
```

```
1 package com.Primitive;
2
3 class Vehicle{
4     String Brand = "BMW";
5
6
7     void Start() {
8         System.out.println("Vechicle started");
9     }
10 }
11
12 class Car extends Vechicle{
13
14     String Fueal = "indian oil";
15
16     void Stop() {
17         System.out.println("Car Stopped");
18     }
19 }
20
21
22 public class TestVechicle {
23
24     public static void main(String[] args) {
25
26
27         //Up-Casting
28         System.out.println("-----");
29
30         Vehicle v = new Car();
31         System.out.println(v.Brand);
32         v.Start();
33         |
34         System.out.println("-----");
35
36         //Down-Casting
37
38         Car c = new Car();
39         // Vechicle v =c;
40
41         Car c1 = (Car)v;
42
43         System.out.println(c1.Brand+" "+c1.Fueal);
44         c.Start();
45         c.Stop();
46
47
48
49
50
51
52
53     }
54
55 }
56
```