

**FACULTY OF
TECHNOLOGY**



**INTERNATIONAL
UNIVERSITY
OF EAST AFRICA**
'Learning to Succeed'

SCIENCE AND

APPLIED OBJECT-ORIENTED PROGRAMMING CLASS ACTIVITY

SOLUTION TO PROBLEM

PROGRAMME: BSSE/BSCS/BIT

YEAR/SEM: YEAR 2 SEM 1

COURSE CODE: BIT2115

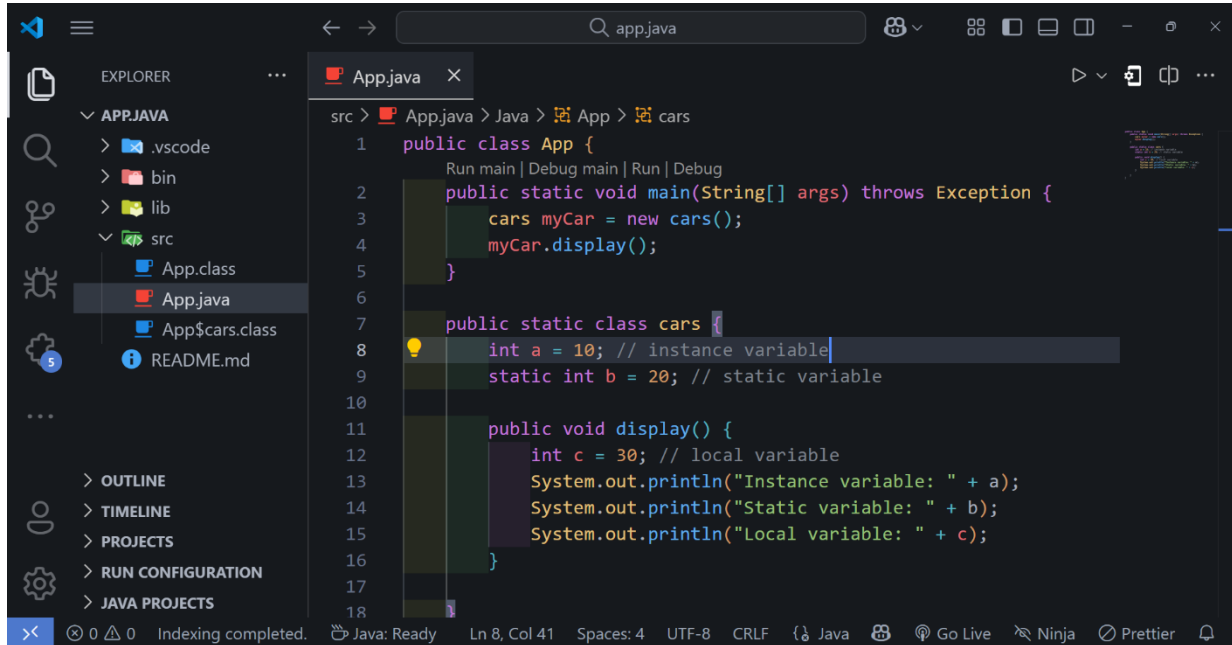
PROBLEM NAME: COMPLETE NAME OF PROBLEM

STUDENT DETAILS:

NAME OF STUDENT	EMMANUEL KUAL MAGOK
REG NUMBER	24/789/BSS-J

APPLIED OBJECT-ORIENTED PROGRAMMING CLASS ACTIVITY

SOURCE-CODE SCREENSHOT



```

src > App.java > Java > App > cars
1  public class App {
2      Run main | Debug main | Run | Debug
3      public static void main(String[] args) throws Exception {
4          cars myCar = new cars();
5          myCar.display();
6      }
7
8      public static class cars {
9          int a = 10; // instance variable
10         static int b = 20; // static variable
11
12         public void display() {
13             int c = 30; // local variable
14             System.out.println("Instance variable: " + a);
15             System.out.println("Static variable: " + b);
16             System.out.println("Local variable: " + c);
17         }
18     }

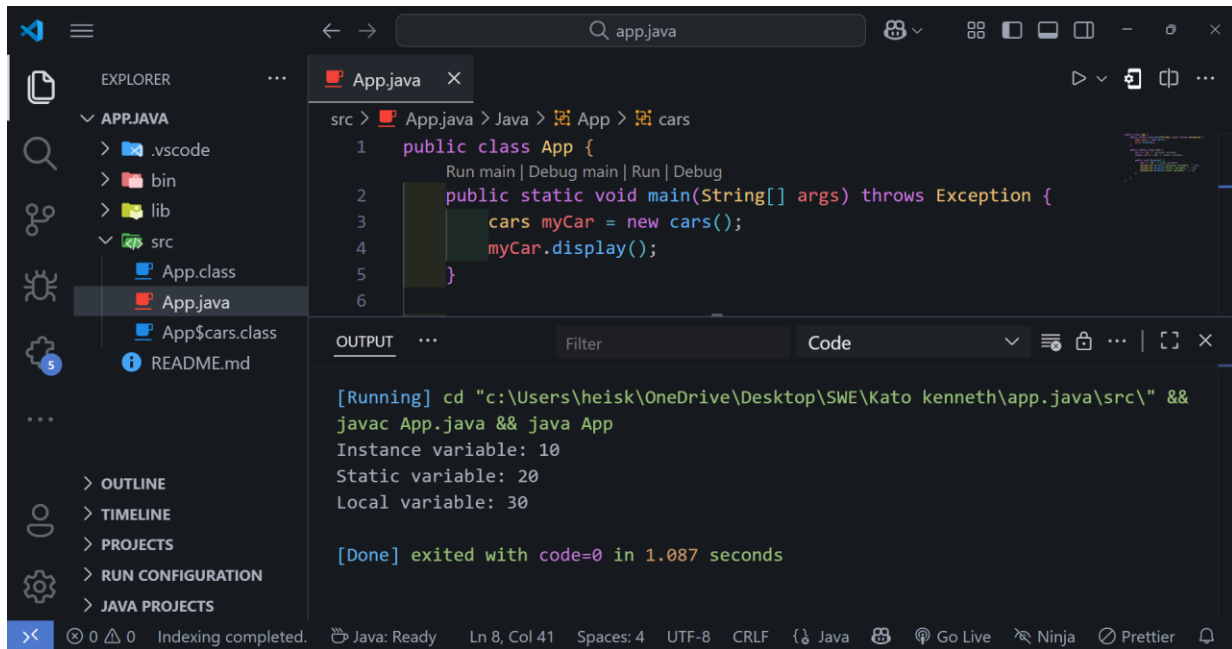
```

Detailed explanation

Line of codes	Explanation
#7	This line declares a public class named “Cars”
#8	This line declares an instance variable named “a”
#9	This line declares a static variable named “b”
#11	This line declares a method named “display”
#12	This line declares a local variable named “a” inside the method called “display”
#13-15	These lines print out the instance, static and local variables

APPLIED OBJECT-ORIENTED PROGRAMMING CLASS ACTIVITY

OUTPUT SCREENSHOT



The screenshot shows the Visual Studio Code interface with a Java project. The Explorer sidebar on the left shows the project structure: APP.JAVA, .vscode, bin, lib, and src. The src folder contains App.class, App.java, App\$cars.class, and README.md. The App.java file is open in the editor, showing the following code:

```
src > App.java > Java > App > cars
1 public class App {
2     Run main | Debug main | Run | Debug
3     public static void main(String[] args) throws Exception {
4         cars myCar = new cars();
5         myCar.display();
6     }
}
```

The OUTPUT panel at the bottom shows the execution results:

```
[Running] cd "c:\Users\heisk\OneDrive\Desktop\SWE\Kato kenneth\app.java\src\" &&
javac App.java && java App
Instance variable: 10
Static variable: 20
Local variable: 30

[Done] exited with code=0 in 1.087 seconds
```

The status bar at the bottom indicates the file is at Ln 8, Col 41, with UTF-8 encoding and CRLF line endings.