

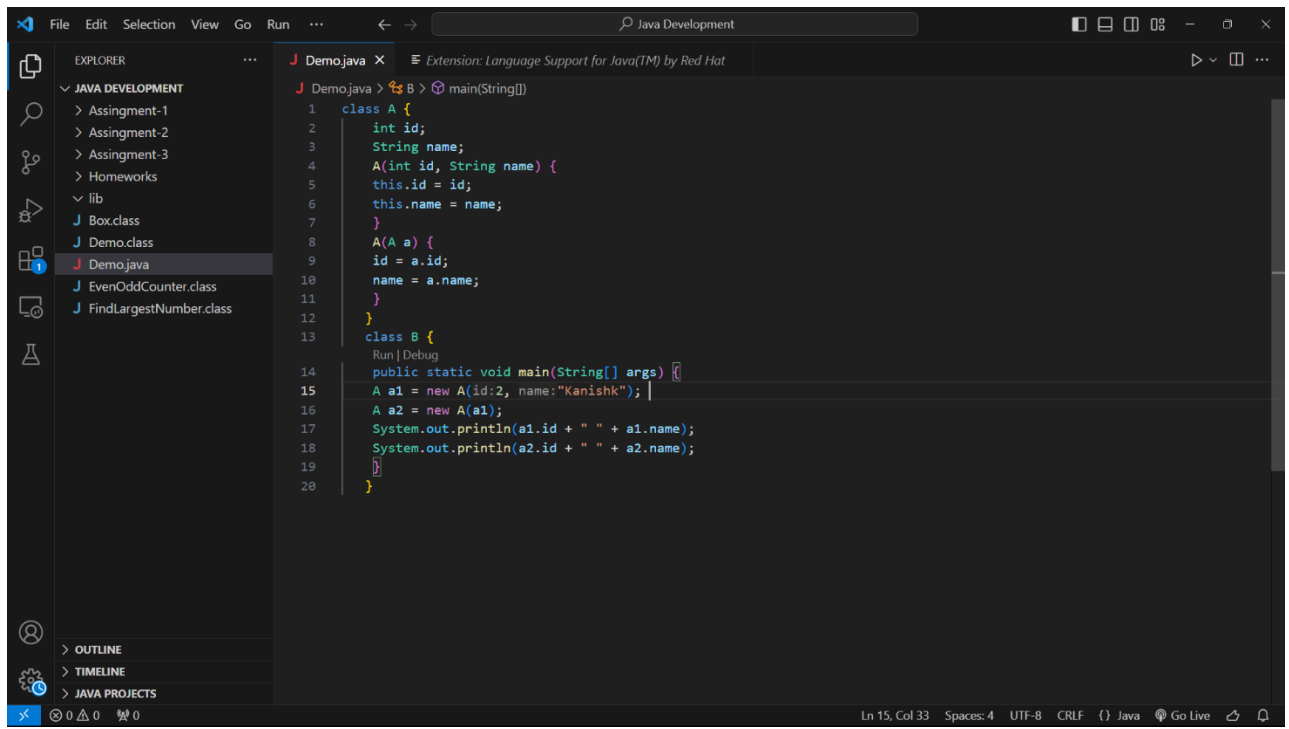
SUBMITTED BY: -

KANISHK

2205130

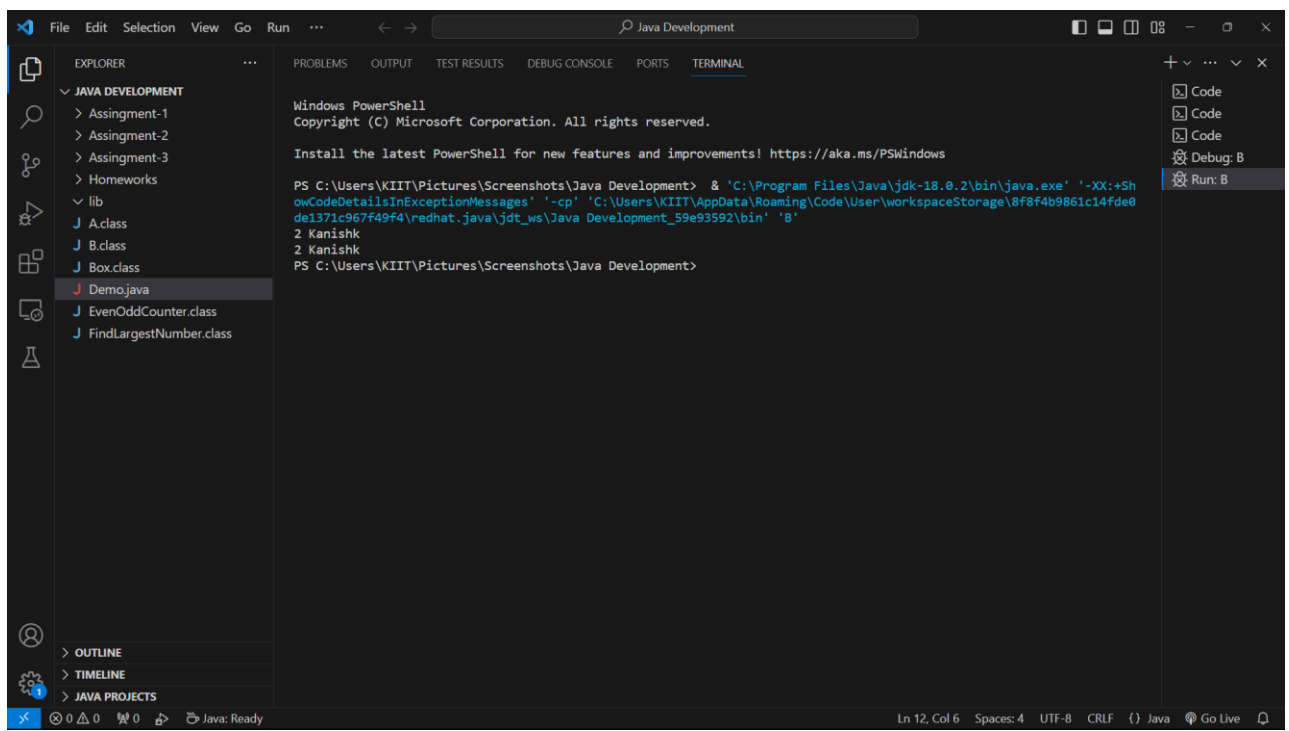
CSE-37

Q1 INPUT: -



```
1 class A {
2     int id;
3     String name;
4     A(int id, String name) {
5         this.id = id;
6         this.name = name;
7     }
8     A(A a) {
9         id = a.id;
10        name = a.name;
11    }
12 }
13 class B {
14     Run | Debug
15     public static void main(String[] args) {
16         A a1 = new A(id:2, name:"Kanishk");
17         A a2 = new A(a1);
18         System.out.println(a1.id + " " + a1.name);
19         System.out.println(a2.id + " " + a2.name);
20     }
21 }
```

OUTPUT: -

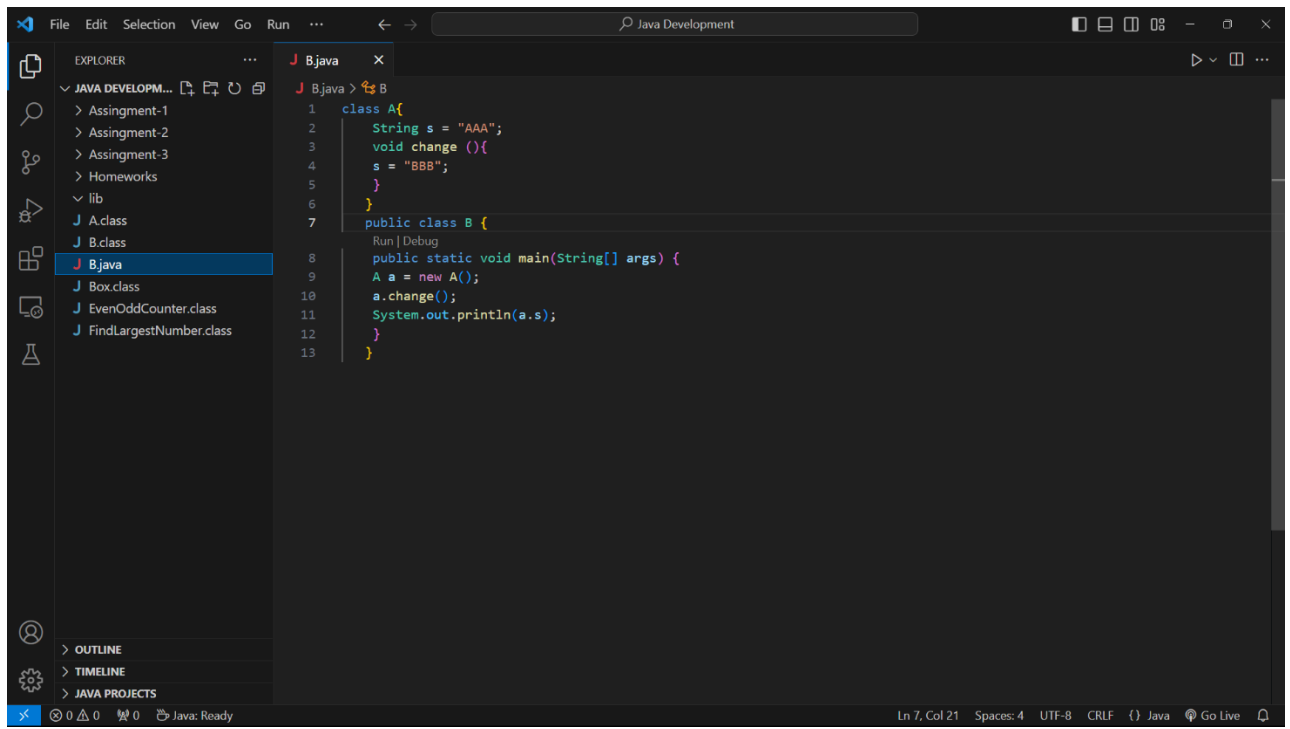


```
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\KIIT\Pictures\Screenshots\Java Development> & 'C:\Program Files\Java\jdk-18.0.2\bin\java.exe' '-XX:+Sh
owCodeDetailsInExceptionMessages' '-cp' 'C:\Users\KIIT\AppData\Roaming\Code\User\workspaceStorage\8f8f4b9861c14fde0
de1371c967f49f4\redhat.java\jdt_ws\Java_Development_59e93592\bin' 'B'
2 Kanishk
2 Kanishk
PS C:\Users\KIIT\Pictures\Screenshots\Java Development>
```

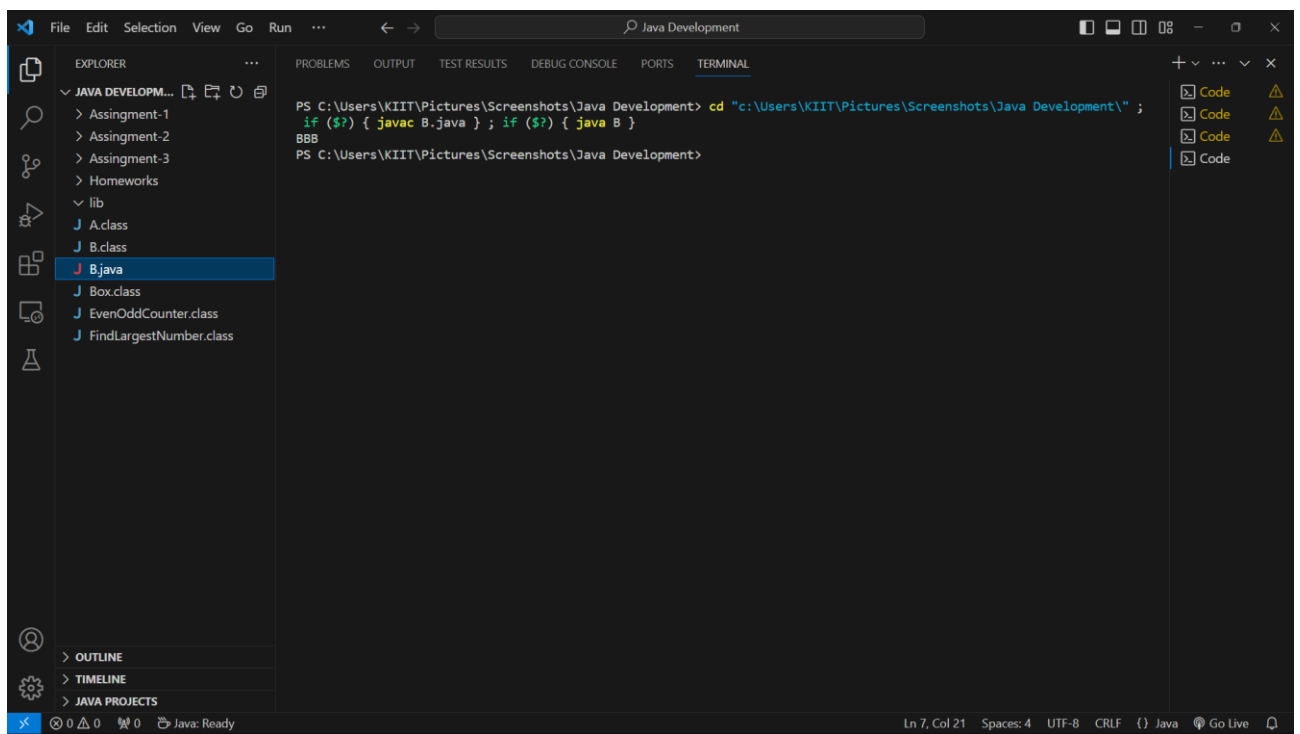
Q2 INPUT:-



The screenshot shows the Visual Studio Code editor with a Java project. The Explorer panel on the left shows the project structure with files like A.class, B.class, and B.java. The main editor window displays the source code for B.java, which contains two classes: A and B. Class A has a String variable s initialized to "AAA" and a change() method that sets s to "BBB". Class B has a main method that creates an instance of A, calls change(), and prints the value of s.

```
1 class A{
2     String s = "AAA";
3     void change (){
4         s = "BBB";
5     }
6 }
7 public class B {
8     Run | Debug
9     public static void main(String[] args) {
10         A a = new A();
11         a.change();
12         System.out.println(a.s);
13     }
14 }
```

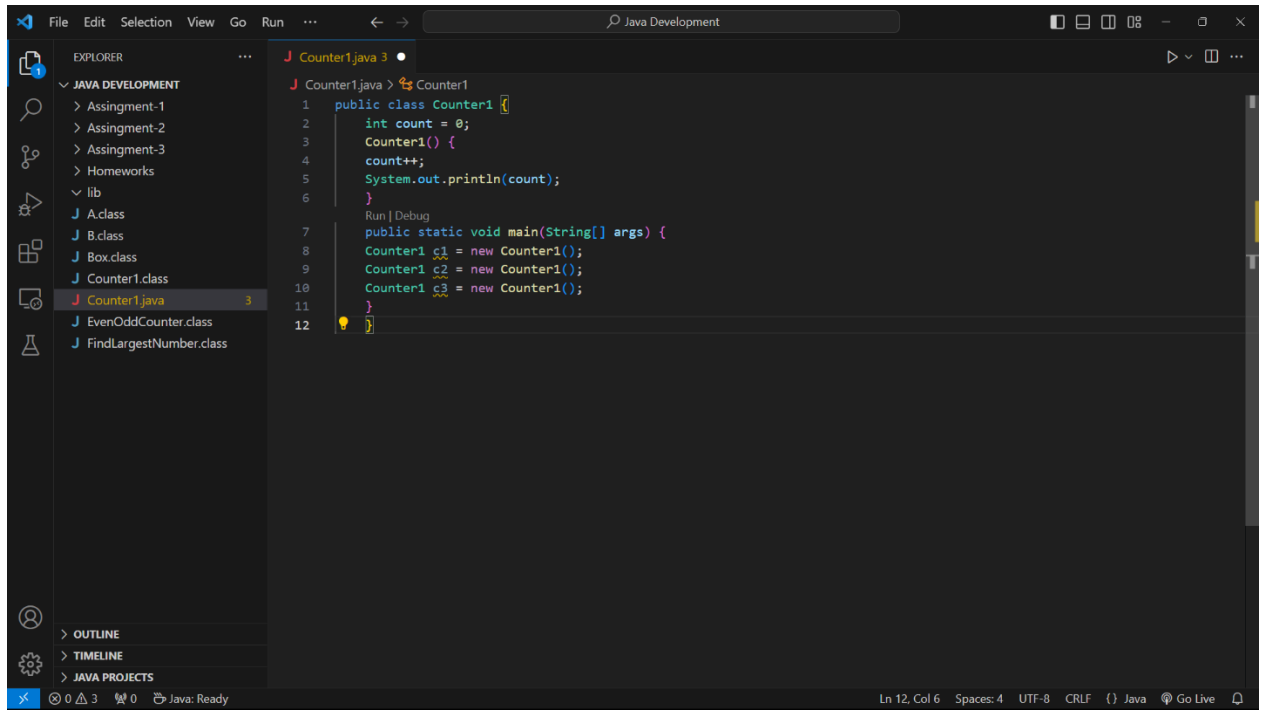
OUTPUT:-



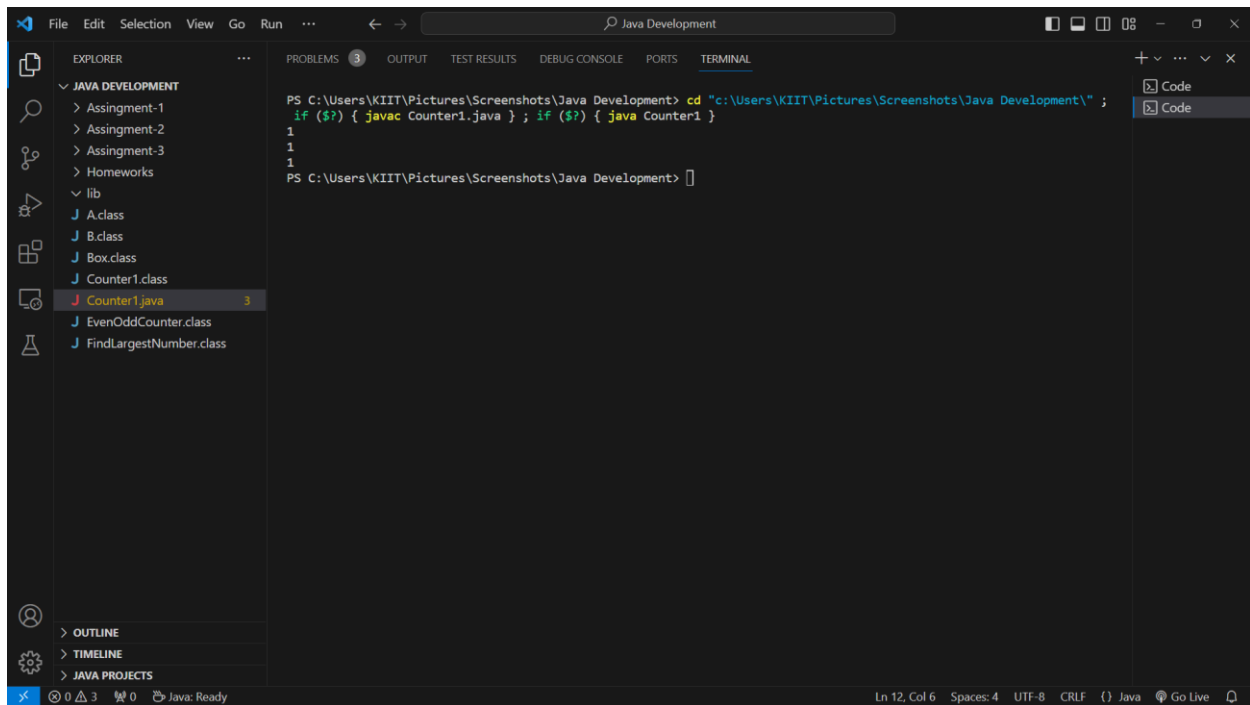
The screenshot shows the Visual Studio Code editor with the terminal panel open. The terminal displays the command to run the Java program and the output. The command is `cd "c:\Users\KIIT\Pictures\Screenshots\Java Development\" ; if ($?) { javac B.java } ; if ($?) { java B }`, and the output is `BBB`.

```
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> cd "c:\Users\KIIT\Pictures\Screenshots\Java Development\" ;
if ($?) { javac B.java } ; if ($?) { java B }
BBB
PS C:\Users\KIIT\Pictures\Screenshots\Java Development>
```

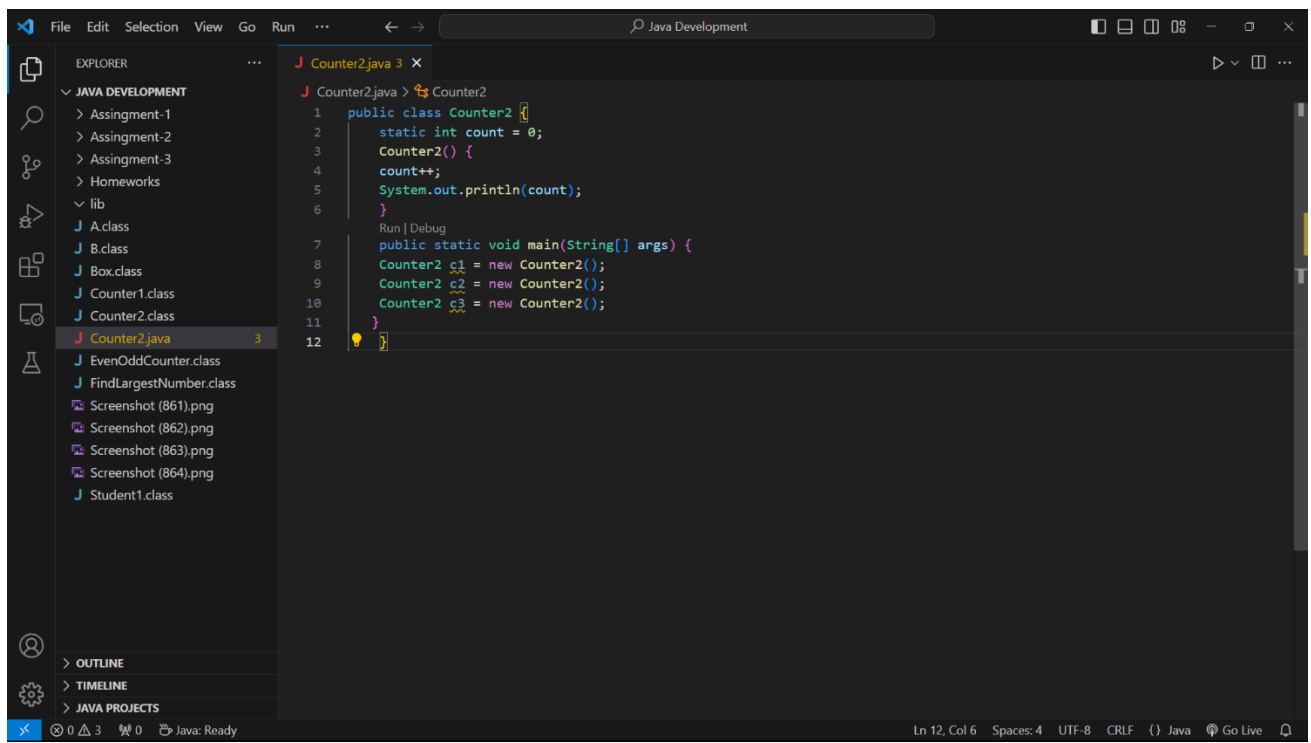
Q3 INPUT: -



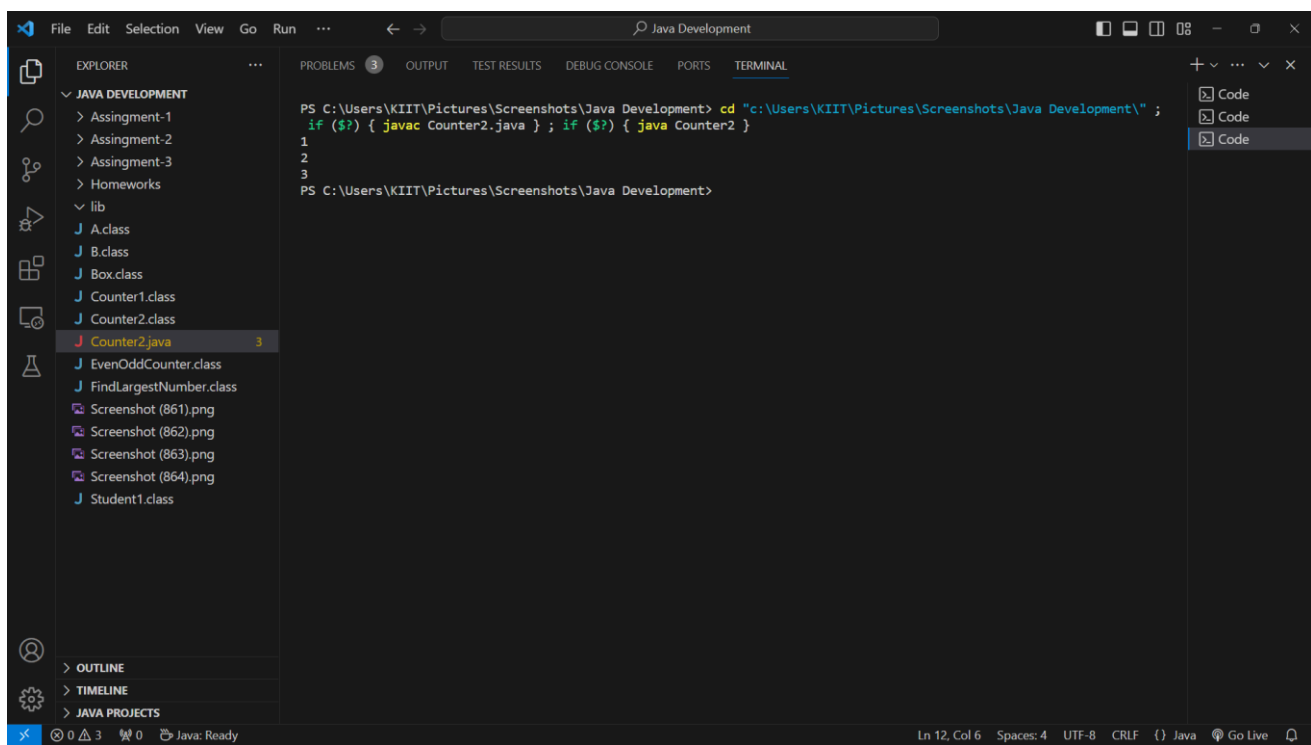
OUTPUT: -



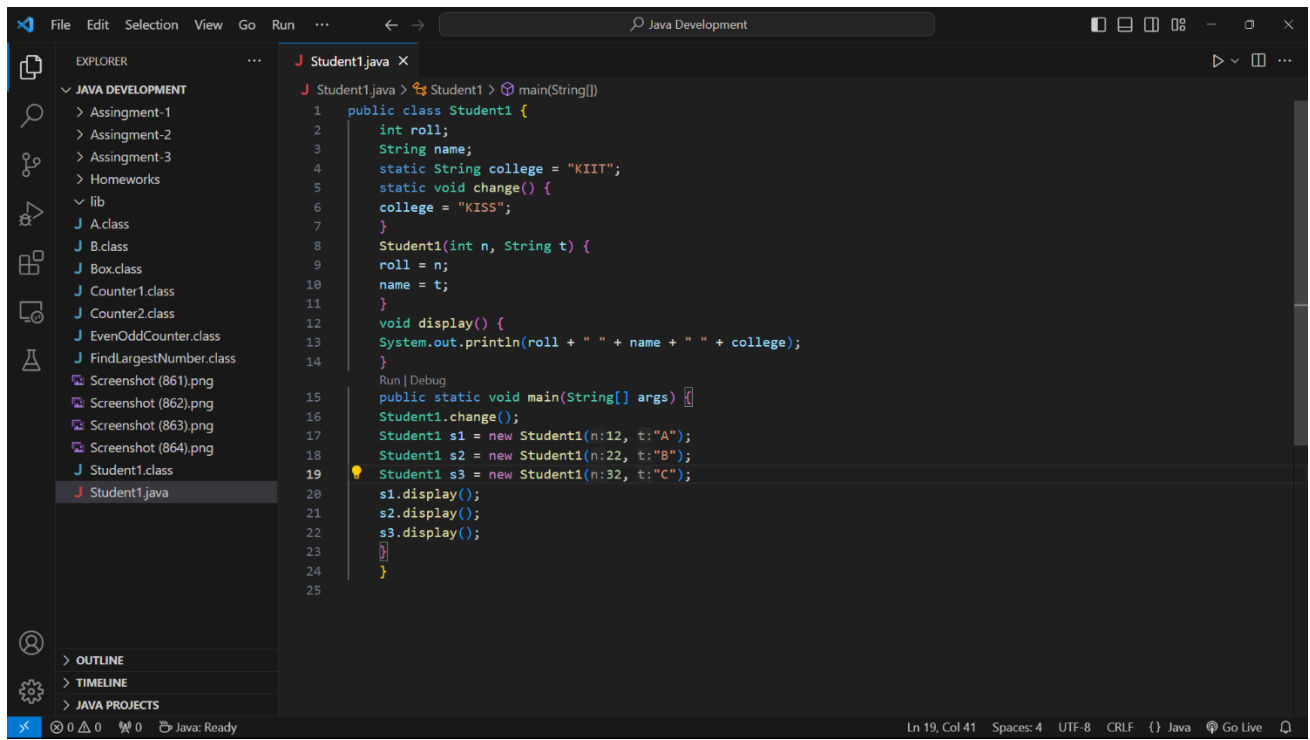
Q4 INPUT: -



OUTPUT:-



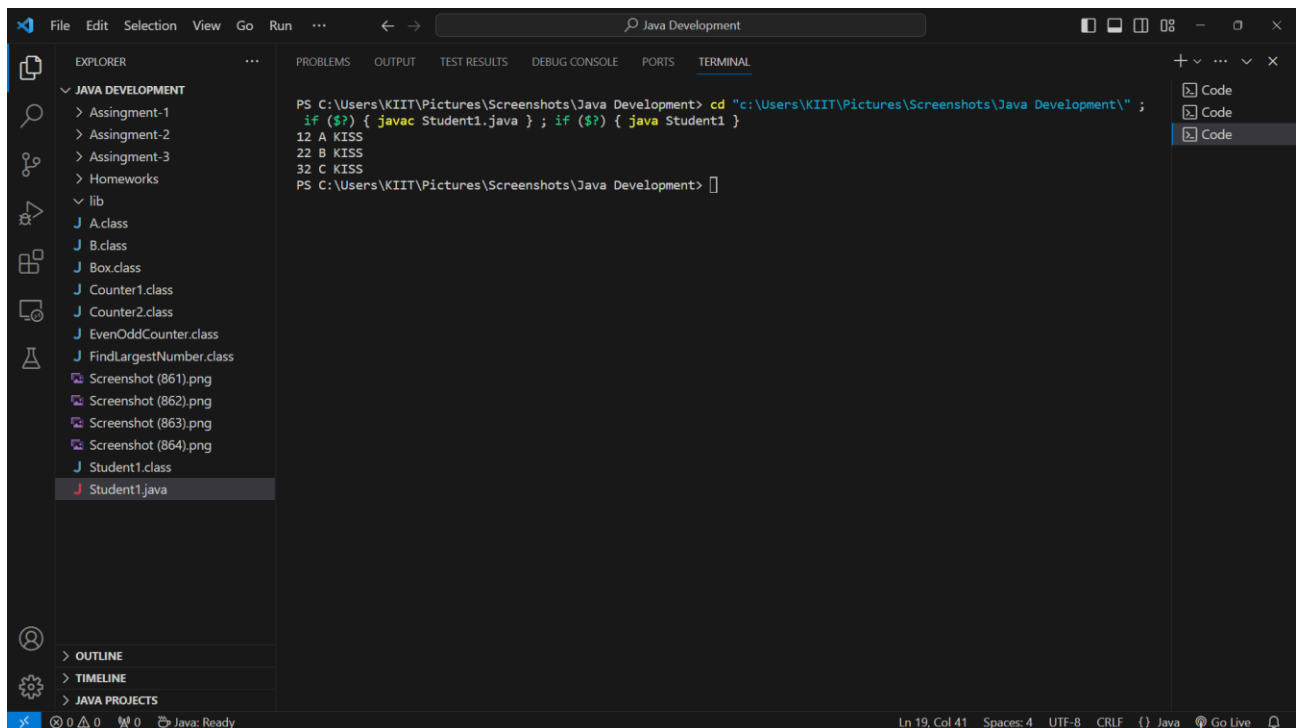
Q5 INPUT:-



The screenshot shows an IDE with the Explorer on the left, displaying a project structure under 'JAVA DEVELOPMENT'. The main editor shows the code for 'Student1.java'. The code defines a 'Student1' class with attributes 'roll' and 'name', a static attribute 'college', and methods 'change()', 'Student1()', and 'display()'. The 'main' method creates three 'Student1' objects and calls 'display()' on each.

```
1 public class Student1 {  
2     int roll;  
3     String name;  
4     static String college = "KIIT";  
5     static void change() {  
6         college = "KISS";  
7     }  
8     Student1(int n, String t) {  
9         roll = n;  
10        name = t;  
11    }  
12    void display() {  
13        System.out.println(roll + " " + name + " " + college);  
14    }  
15    Run | Debug  
16    public static void main(String[] args) {  
17        Student1.change();  
18        Student1 s1 = new Student1(n:12, t:"A");  
19        Student1 s2 = new Student1(n:22, t:"B");  
20        Student1 s3 = new Student1(n:32, t:"C");  
21        s1.display();  
22        s2.display();  
23        s3.display();  
24    }  
25 }
```

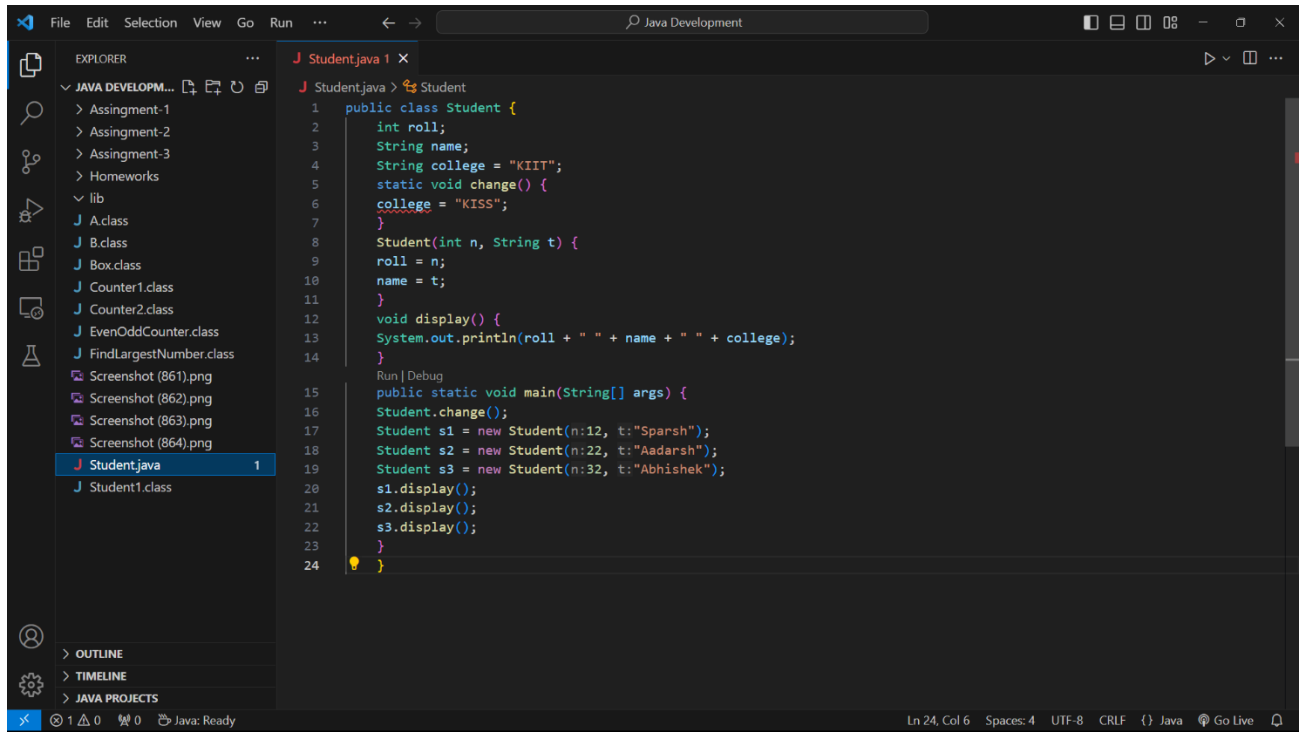
OUTPUT:-



The screenshot shows the same IDE with the 'TERMINAL' tab active. It displays the command to compile and run the 'Student1.java' file, followed by the output of the program, which prints the details of three students.

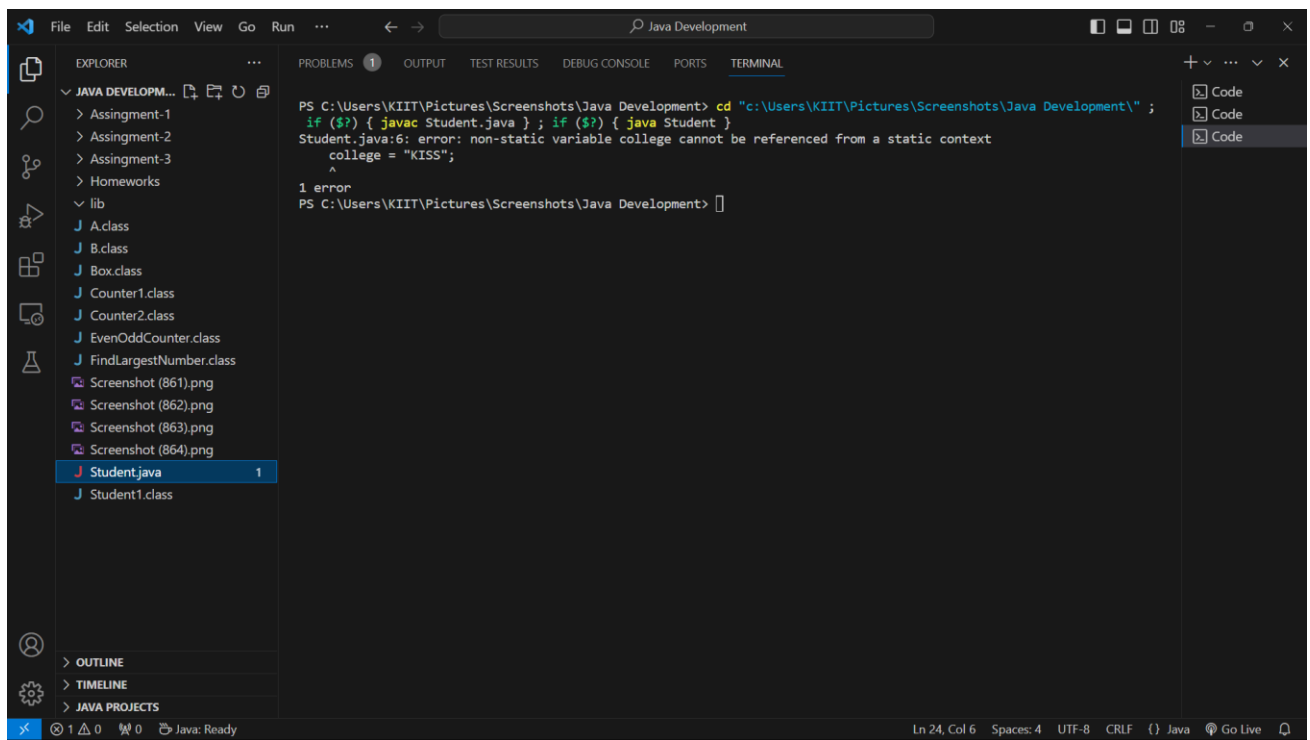
```
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> cd "c:\Users\KIIT\Pictures\Screenshots\Java Development\" ;  
if ($?) { javac Student1.java } ; if ($?) { java Student1 }  
12 A KISS  
22 B KISS  
32 C KISS  
PS C:\Users\KIIT\Pictures\Screenshots\Java Development>
```

Q6 INPUT:-



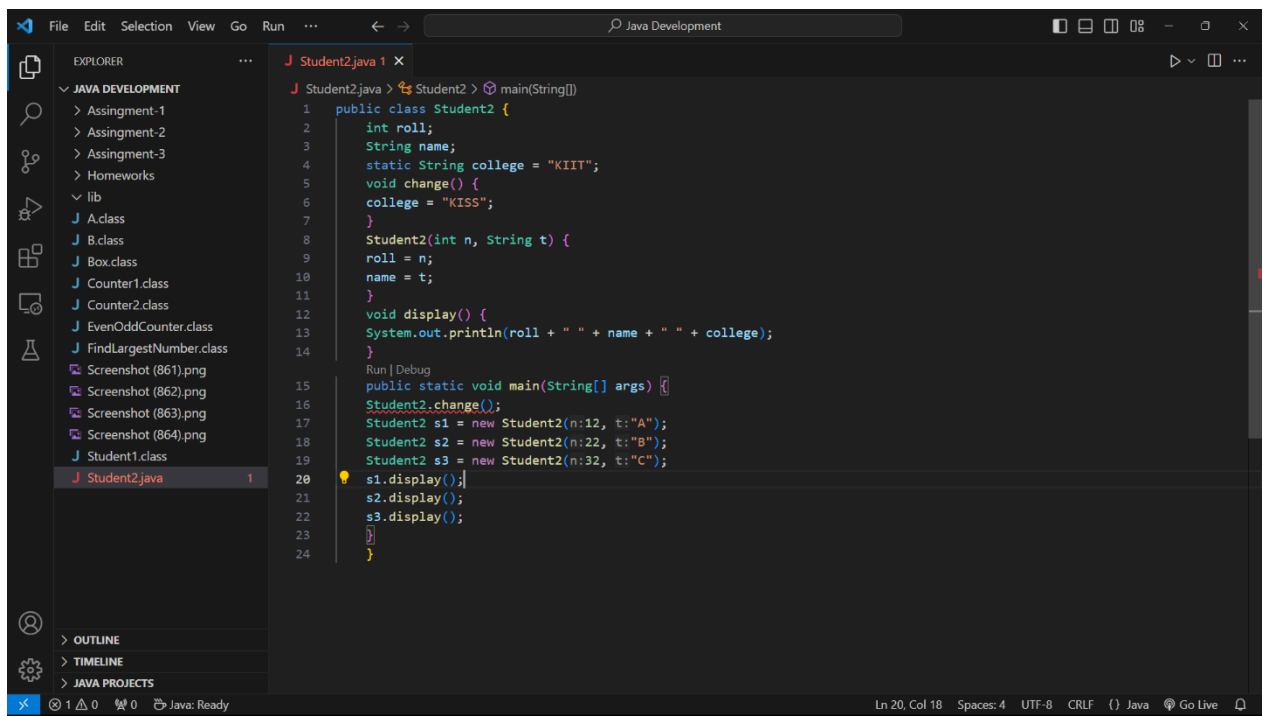
```
1 public class Student {
2     int roll;
3     String name;
4     String college = "KIIT";
5     static void change() {
6         college = "KISS";
7     }
8     Student(int n, String t) {
9         roll = n;
10        name = t;
11    }
12    void display() {
13        System.out.println(roll + " " + name + " " + college);
14    }
15    Run | Debug
16    public static void main(String[] args) {
17        Student.change();
18        Student s1 = new Student(n:12, t:"Sparsh");
19        Student s2 = new Student(n:22, t:"Aadarsh");
20        Student s3 = new Student(n:32, t:"Abhishek");
21        s1.display();
22        s2.display();
23        s3.display();
24    }
25 }
```

OUTPUT:-



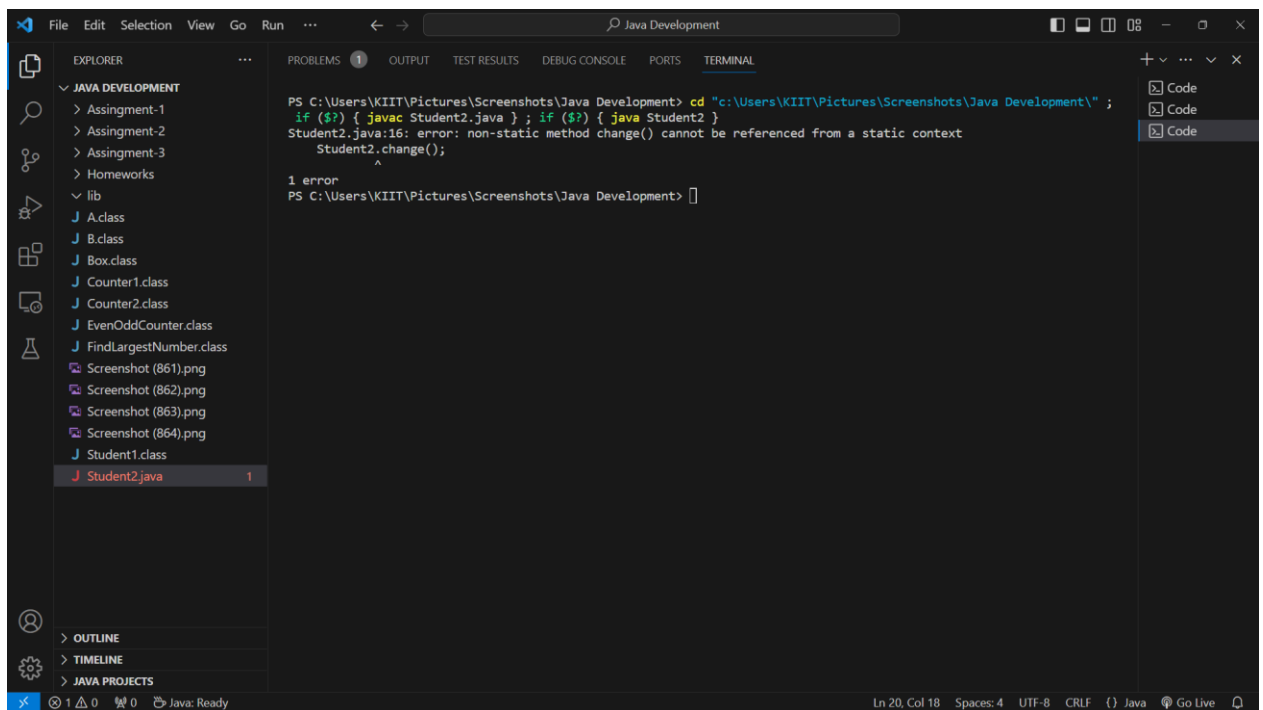
```
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> cd "c:\Users\KIIT\Pictures\Screenshots\Java Development\" ;
if ($?) { javac Student.java } ; if ($?) { java Student }
Student.java:6: error: non-static variable college cannot be referenced from a static context
    college = "KISS";
    ^
1 error
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> 
```

Q7 INPUT:-



```
1 public class Student2 {
2     int roll;
3     String name;
4     static String college = "KIIT";
5     void change() {
6         college = "KISS";
7     }
8     Student2(int n, String t) {
9         roll = n;
10        name = t;
11    }
12    void display() {
13        System.out.println(roll + " " + name + " " + college);
14    }
15    Run | Debug
16    public static void main(String[] args) {
17        Student2.change();
18        Student2 s1 = new Student2(n:12, t:"A");
19        Student2 s2 = new Student2(n:22, t:"B");
20        Student2 s3 = new Student2(n:32, t:"C");
21        s1.display();
22        s2.display();
23        s3.display();
24    }
25 }
```

OUTPUT:-



```
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> cd "c:\Users\KIIT\Pictures\Screenshots\Java Development\" ;
if ($?) { javac Student2.java } ; if ($?) { java Student2 }
Student2.java:16: error: non-static method change() cannot be referenced from a static context
    Student2.change();
                ^
1 error
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> 
```