

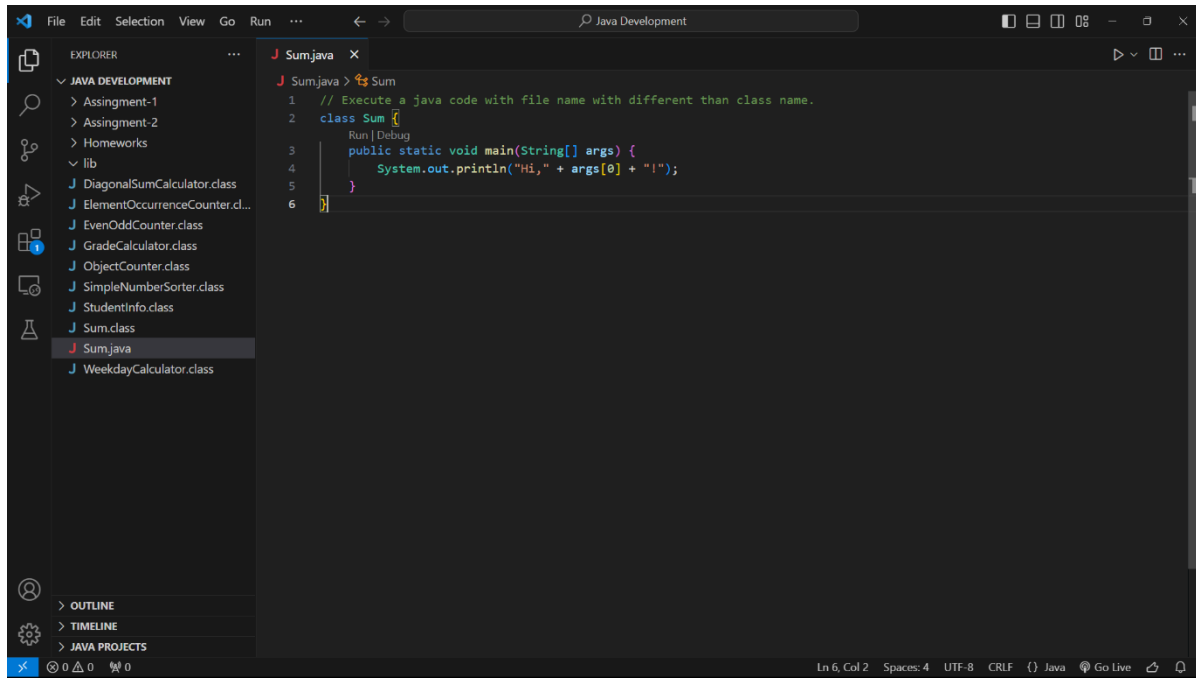
SUBMITTED BY:-

KANISHK

2205130

CSE-37

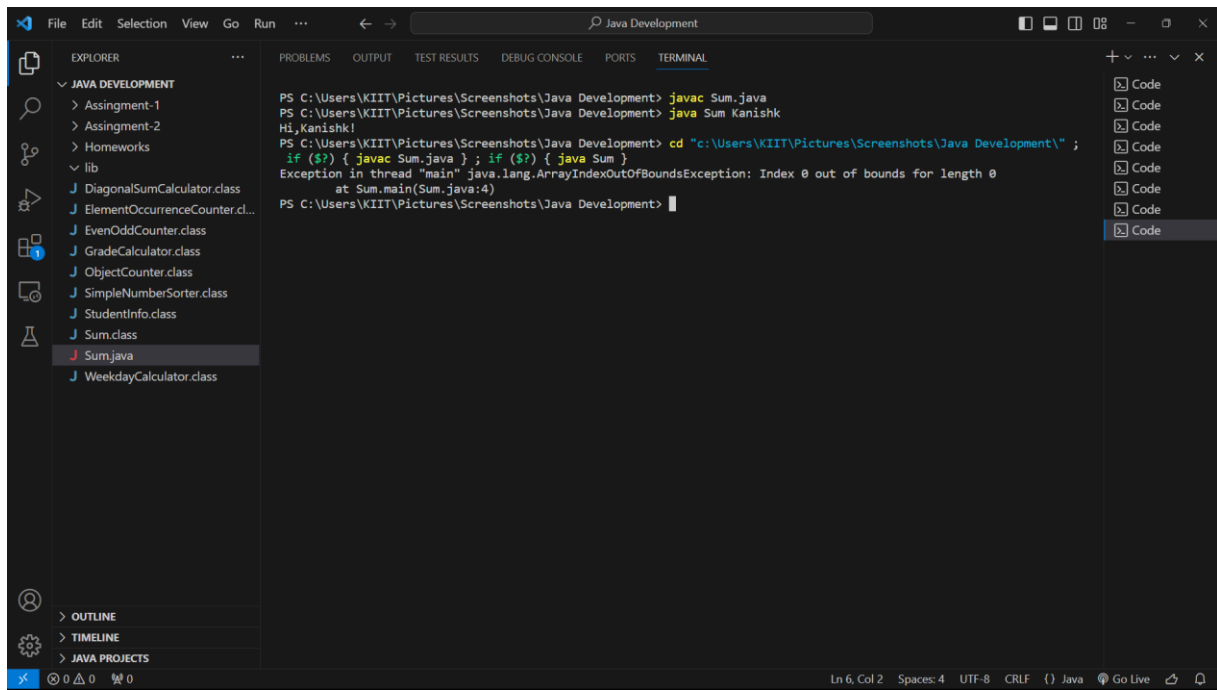
Q1 INPUT: -



The screenshot shows the Visual Studio Code editor with the 'Sum.java' file open. The Explorer sidebar on the left lists several Java files under 'JAVA DEVELOPMENT', including 'Sum.java'. The main editor area displays the following code:

```
1 // Execute a java code with file name with different than class name.
2 class Sum {
3     public static void main(String[] args) {
4         System.out.println("Hi," + args[0] + "!");
5     }
6 }
```

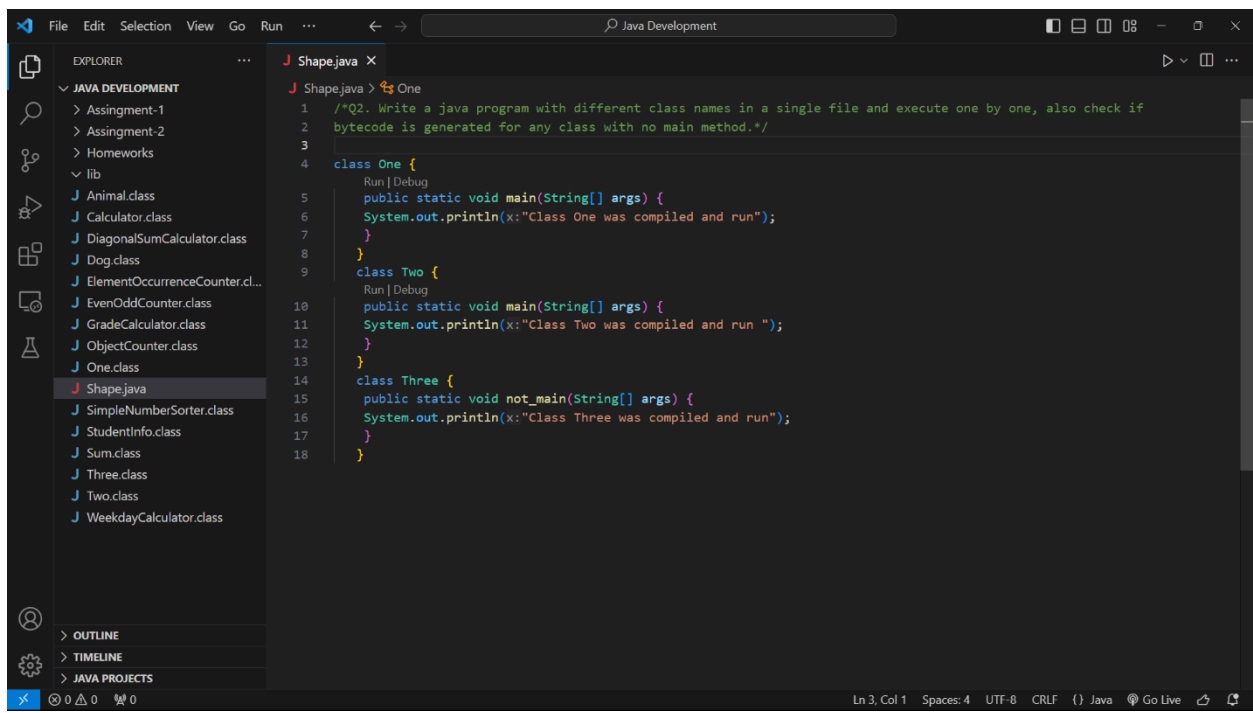
OUTPUT: -



The screenshot shows the Visual Studio Code editor with the 'Sum.java' file open. The 'TERMINAL' tab is active, displaying the following commands and output:

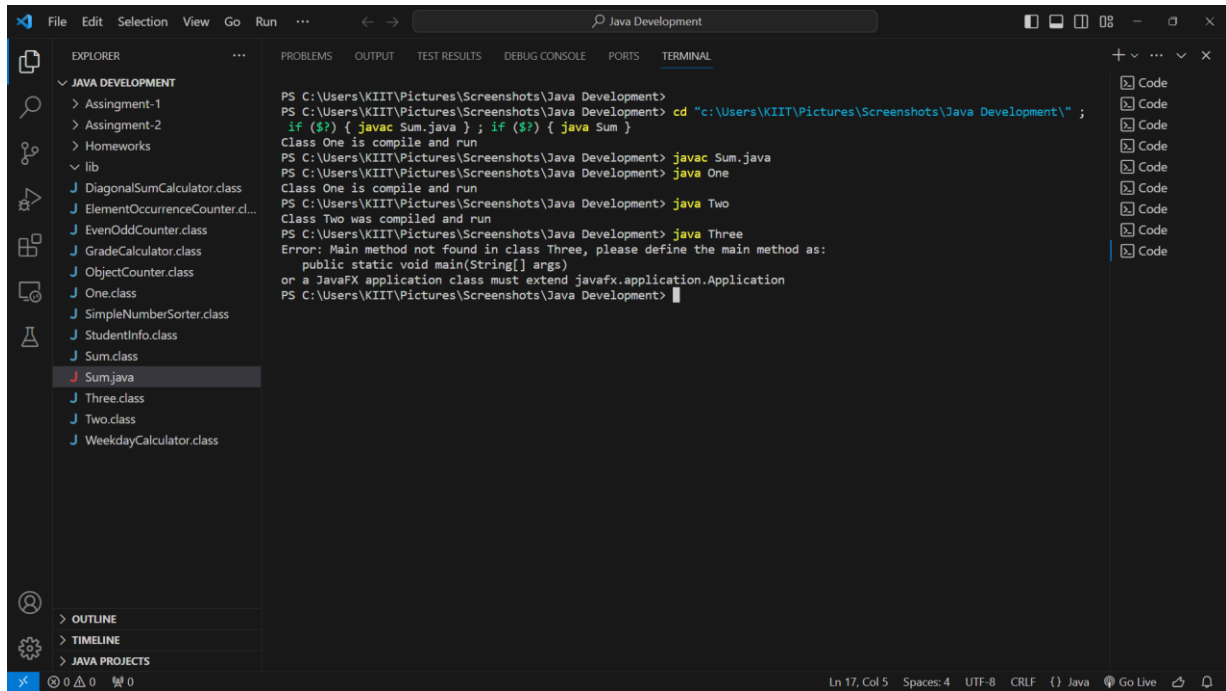
```
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> javac Sum.java
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> java Sum Kanishk
Hi,Kanishk!
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> cd "c:\Users\KIIT\Pictures\Screenshots\Java Development\" ;
if ($?) { javac Sum.java } ; if ($?) { java Sum }
Exception in thread "main" java.lang.ArrayIndexOutOfBoundsException: Index 0 out of bounds for length 0
    at Sum.main(Sum.java:4)
PS C:\Users\KIIT\Pictures\Screenshots\Java Development>
```

Q2 INPUT:-



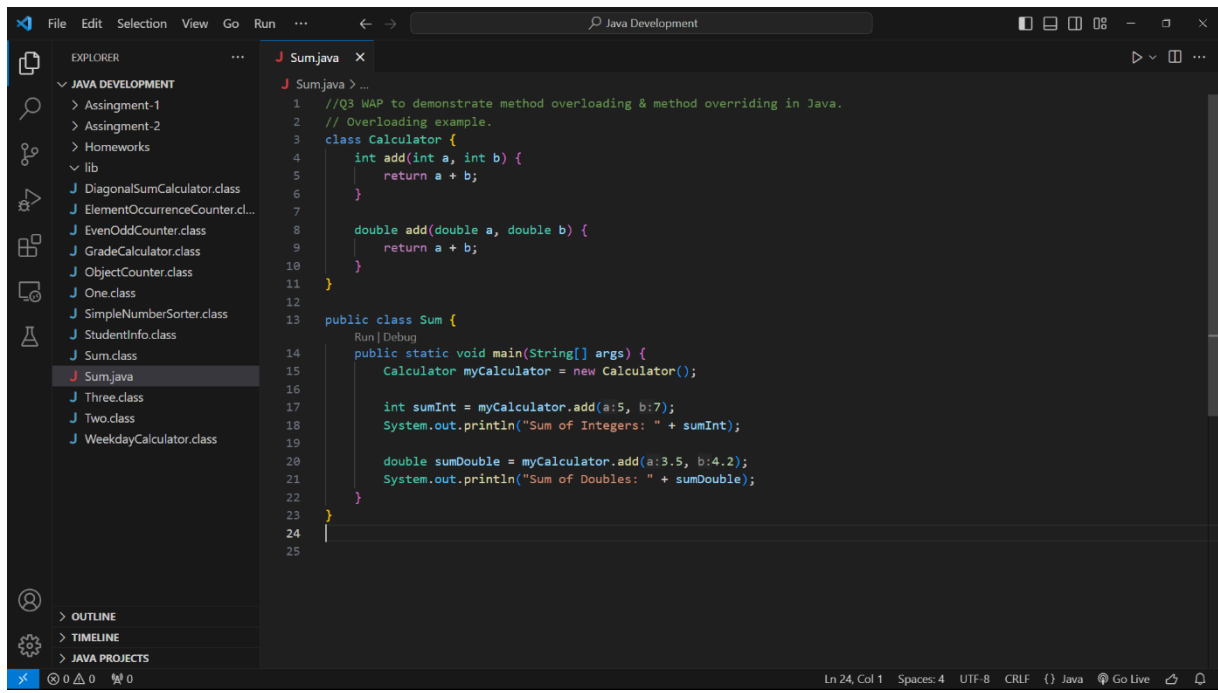
```
1  /*Q2. Write a java program with different class names in a single file and execute one by one, also check if
2  bytecode is generated for any class with no main method.*/
3
4  class One {
5      public static void main(String[] args) {
6          System.out.println(x:"Class One was compiled and run");
7      }
8  }
9  class Two {
10     public static void main(String[] args) {
11         System.out.println(x:"Class Two was compiled and run ");
12     }
13 }
14 class Three {
15     public static void not_main(String[] args) {
16         System.out.println(x:"Class Three was compiled and run");
17     }
18 }
```

OUTPUT:-



```
PS C:\Users\KIIT\Pictures\Screenshots\Java Development>
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> cd "c:\Users\KIIT\Pictures\Screenshots\Java Development\" ;
if ($?) { javac Sum.java } ; if ($?) { java Sum }
Class One is compile and run
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> javac Sum.java
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> java One
Class One is compile and run
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> java Two
Class Two was compiled and run
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> java Three
Error: Main method not found in class Three, please define the main method as:
  public static void main(String[] args)
or a JavaFX application class must extend javafx.application.Application
PS C:\Users\KIIT\Pictures\Screenshots\Java Development>
```

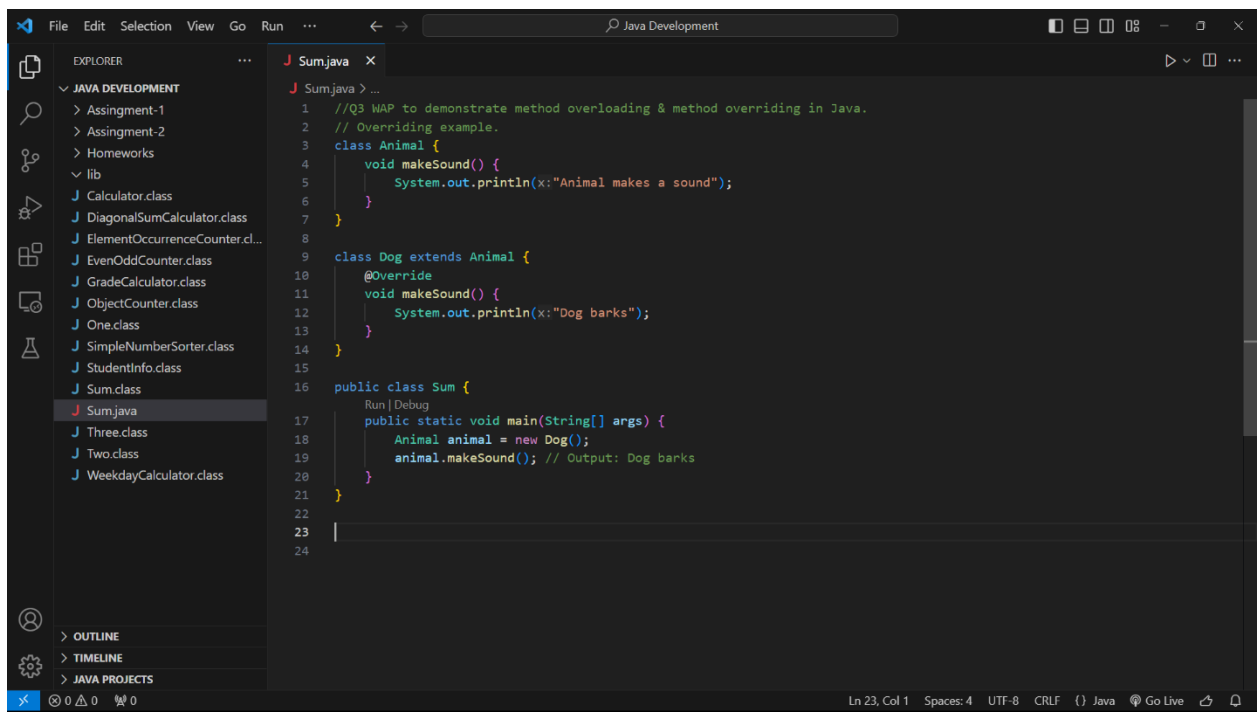
Q3 INPUT: -



This screenshot shows the VS Code editor with a Java project named 'Java Development'. The Explorer sidebar on the left lists several files under 'JAVA DEVELOPMENT', including 'Sum.java' which is currently selected. The main editor window displays the code for 'Sum.java'. The code includes a 'Calculator' class with two overloaded 'add' methods: one for integers and one for doubles. A 'Sum' class contains a 'main' method that creates a 'Calculator' object and uses both 'add' methods to calculate the sum of integers (5 + 7) and doubles (3.5 + 4.2), printing the results.

```
1 //Q3 WAP to demonstrate method overloading & method overriding in Java.
2 // Overloading example.
3 class Calculator {
4     int add(int a, int b) {
5         return a + b;
6     }
7
8     double add(double a, double b) {
9         return a + b;
10    }
11 }
12
13 public class Sum {
14     Run | Debug
15     public static void main(String[] args) {
16         Calculator myCalculator = new Calculator();
17
18         int sumInt = myCalculator.add(a:5, b:7);
19         System.out.println("Sum of Integers: " + sumInt);
20
21         double sumDouble = myCalculator.add(a:3.5, b:4.2);
22         System.out.println("Sum of Doubles: " + sumDouble);
23     }
24 }
25
```

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This screenshot shows the VS Code editor with the same 'Java Development' project. The Explorer sidebar now lists more files, including 'Animal.class', 'Dog.class', and 'Sum.class'. The main editor window displays the code for 'Sum.java'. The code includes an 'Animal' class with a 'makeSound' method that prints 'Animal makes a sound'. A 'Dog' class extends 'Animal' and overrides the 'makeSound' method to print 'Dog barks'. The 'Sum' class contains a 'main' method that creates a 'Dog' object and calls its 'makeSound' method, resulting in the output 'Dog barks'.

```
1 //Q3 WAP to demonstrate method overloading & method overriding in Java.
2 // Overriding example.
3 class Animal {
4     void makeSound() {
5         System.out.println(x:"Animal makes a sound");
6     }
7 }
8
9 class Dog extends Animal {
10     @Override
11     void makeSound() {
12         System.out.println(x:"Dog barks");
13     }
14 }
15
16 public class Sum {
17     Run | Debug
18     public static void main(String[] args) {
19         Animal animal = new Dog();
20         animal.makeSound(); // Output: Dog barks
21     }
22 }
23
24
```

Ln 23, Col 1 Spaces: 4 UTF-8 CRLF {} Java Go Live

OUTPUT

