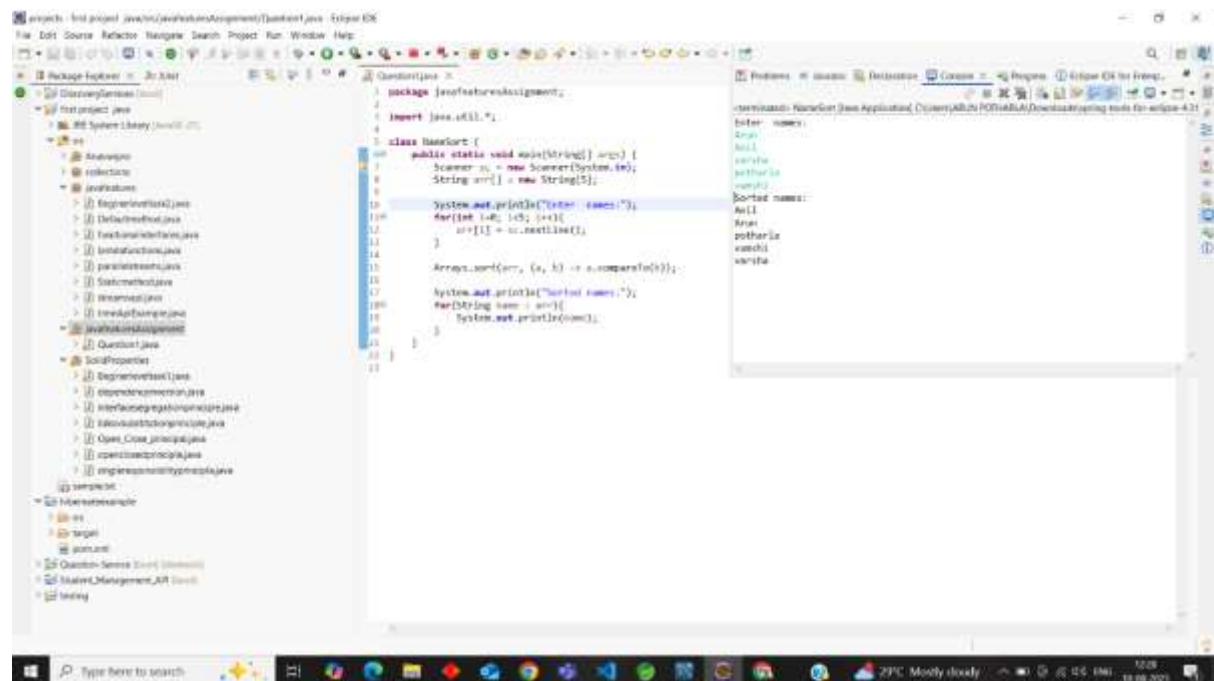


Java Features Assignment

NameSort Program



```
package javafeaturesassignment;

import java.util.*;

class NameSort {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        String arr[] = new String[5];

        System.out.println("Enter names:");
        for(int i=0; i<5; i++){
            arr[i] = sc.nextLine();
        }

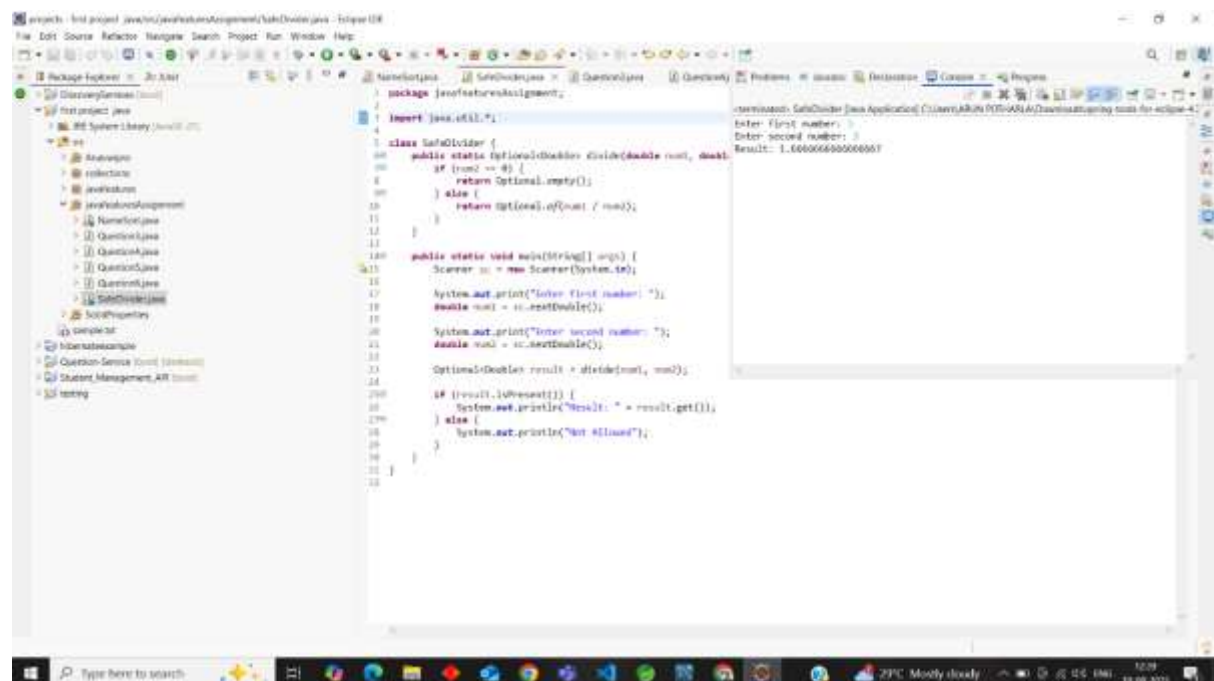
        Arrays.sort(arr, (a, b) -> a.compareTo(b));

        System.out.println("Sorted names:");
        for(String name : arr){
            System.out.println(name);
        }
    }
}
```

Console Output:

```
Enter names:
Anil
varsha
potharix
varsha
varsha
Sorted names:
Anil
Anan
potharix
varsha
varsha
```

Safe Divider



```
package javafeaturesassignment;

import java.util.*;

class SafeDivider {

    public static OptionalDouble divide(double num1, double num2) {
        if (num2 == 0) {
            return Optional.empty();
        } else {
            return Optional.of(num1 / num2);
        }
    }

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter first number:");
        double num1 = sc.nextDouble();

        System.out.println("Enter second number:");
        double num2 = sc.nextDouble();

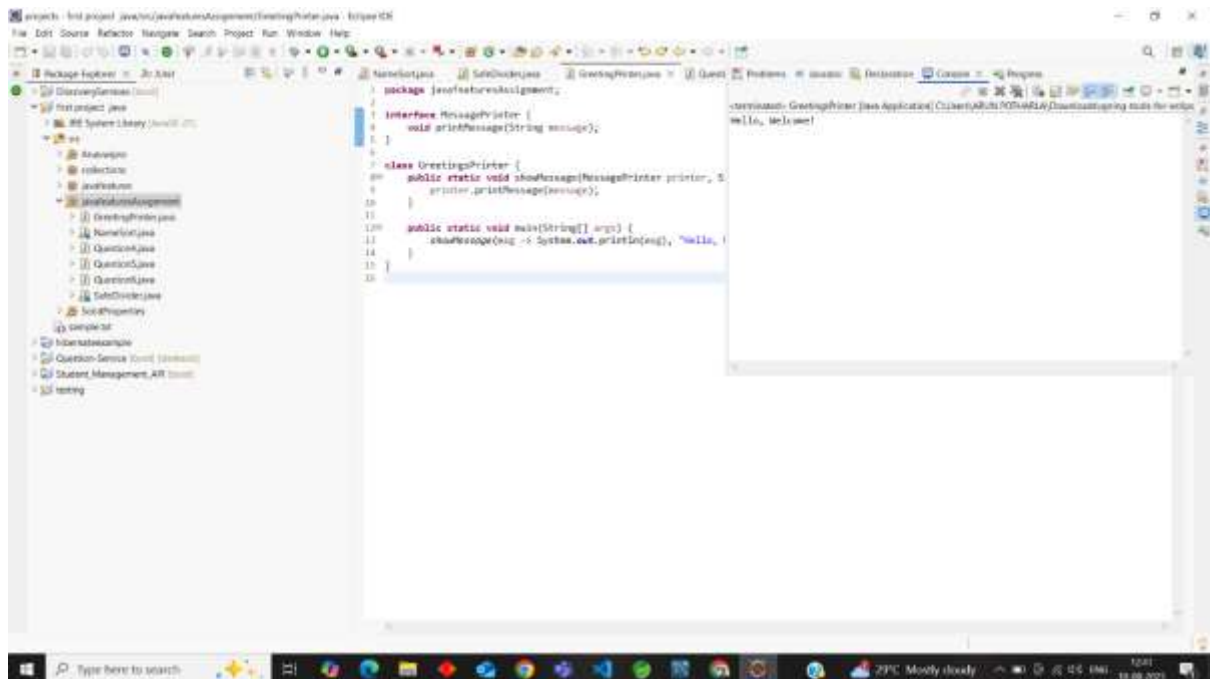
        OptionalDouble result = divide(num1, num2);

        if (result.isPresent()) {
            System.out.println("Result: " + result.get());
        } else {
            System.out.println("Not allowed");
        }
    }
}
```

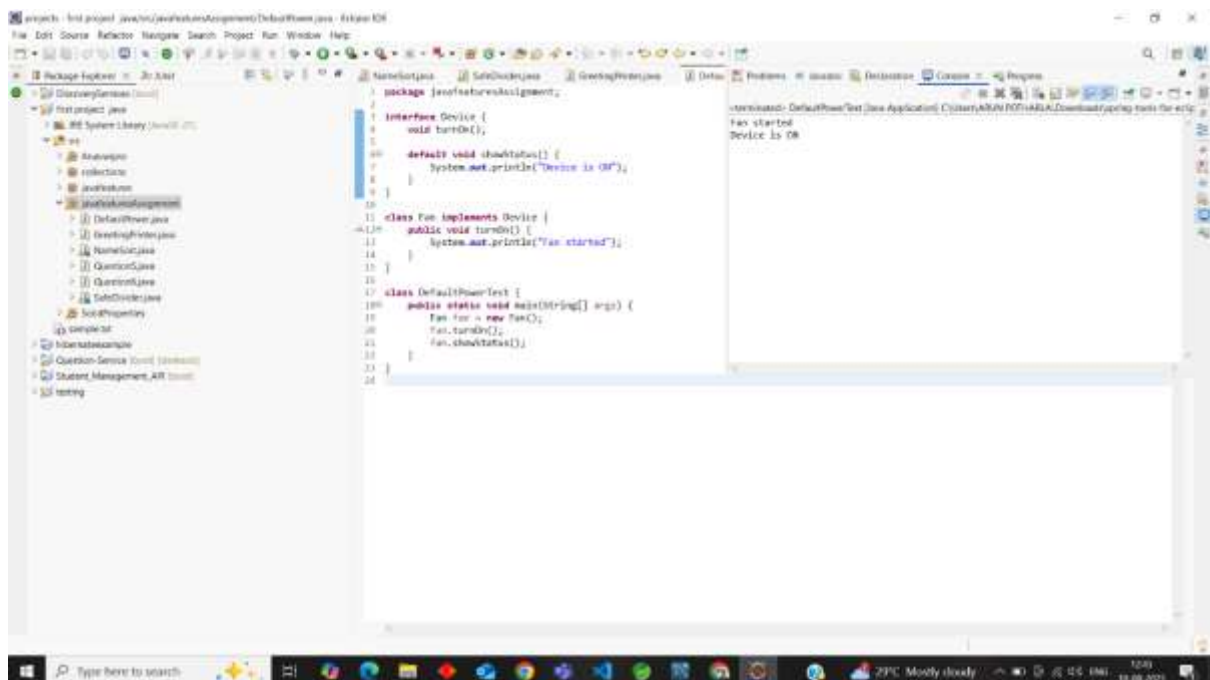
Console Output:

```
Enter first number:
1.6666666666666667
Enter second number:
0
Result: 1.6666666666666667
```

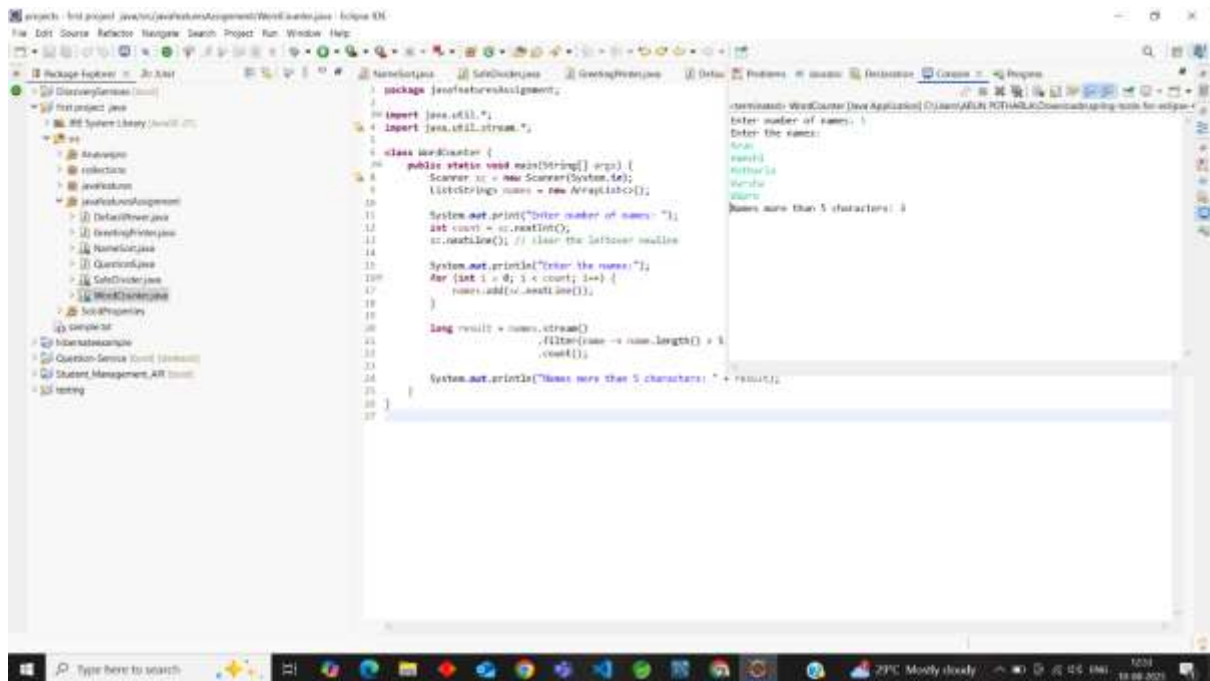
Message Printer Program



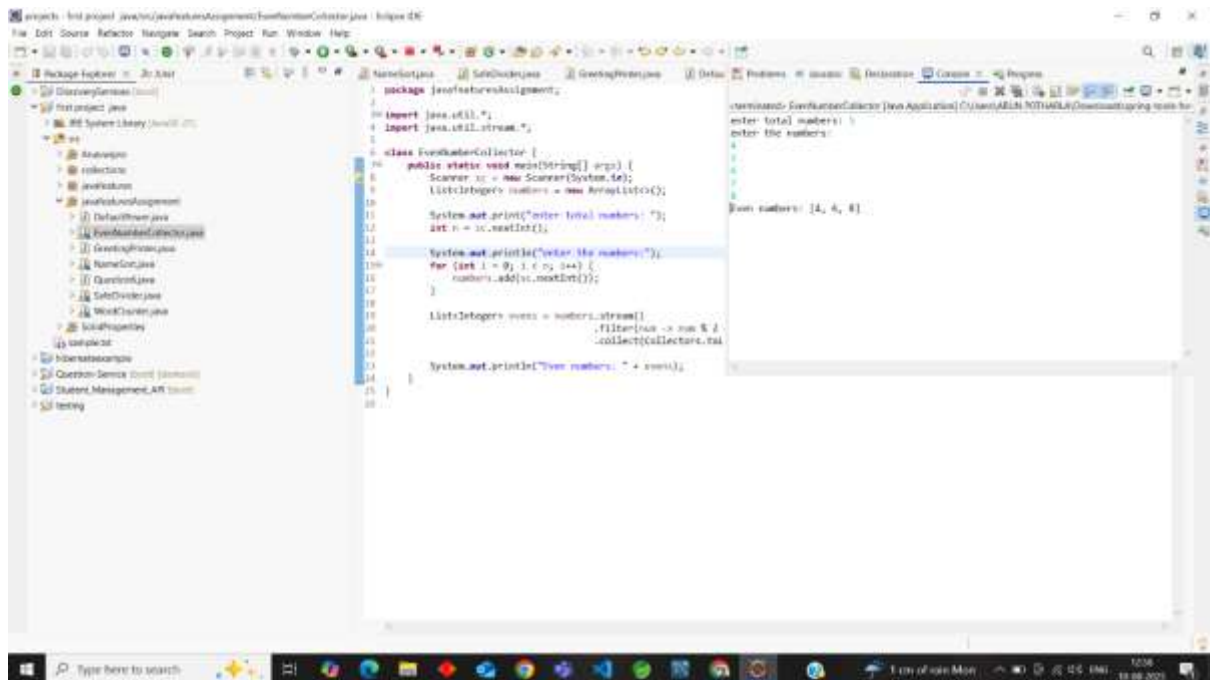
Default Power



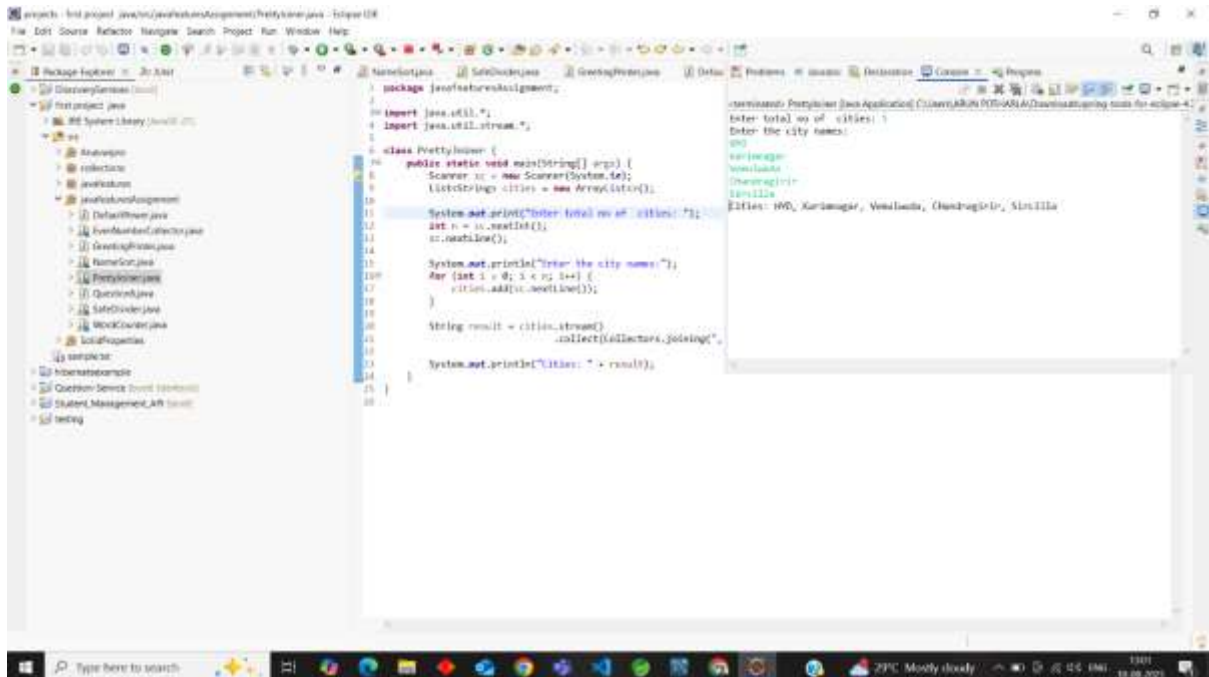
Name Finder



Even Number Collector



Pretty Joiner



```
package javafeatures.assignment;

import java.util.*;
import java.util.stream.*;

class PrettyJoiner {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        List<String> cities = new ArrayList<>();

        System.out.println("Enter total no of cities: ");
        int n = sc.nextInt();
        sc.nextLine();

        System.out.println("Enter the city names:");
        for (int i = 0; i < n; i++) {
            cities.add(sc.nextLine());
        }

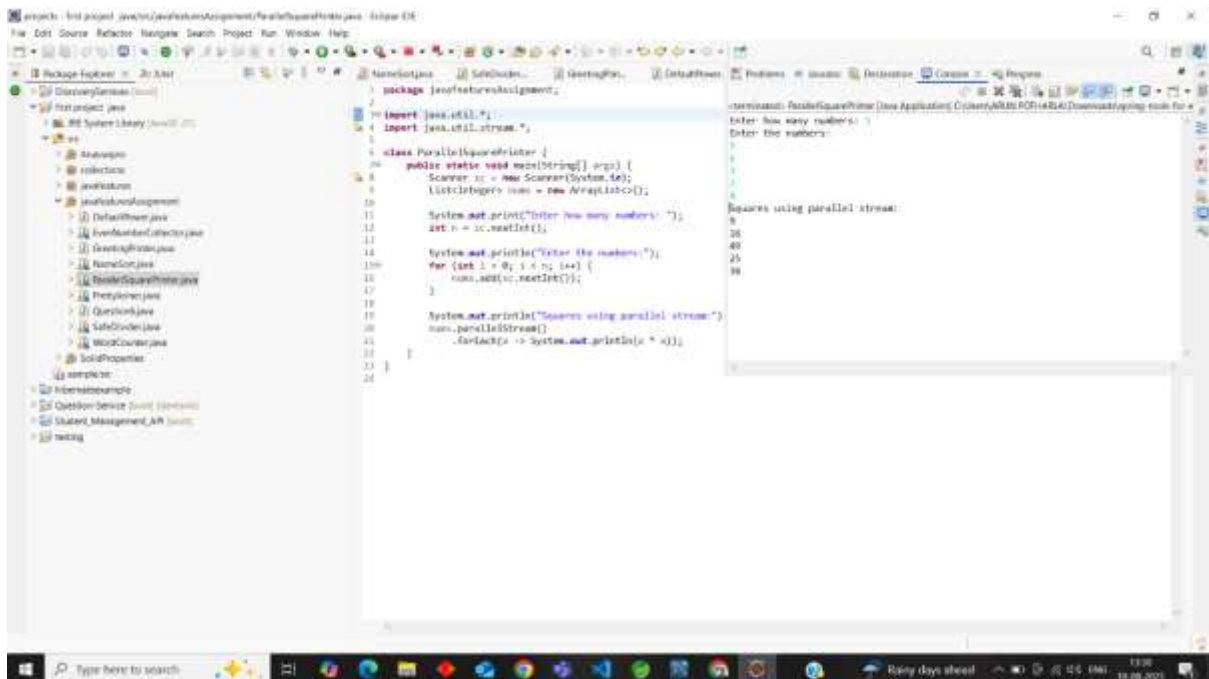
        String result = cities.stream()
            .collect(Collectors.joining(", "));

        System.out.println("Cities: " + result);
    }
}
```

Enter total no of cities: 1
Enter the city names:
100
Karimnagar
Vaidhanta
Choudhurgiri
Sivakilla

Cities: 100, Karimnagar, Vaidhanta, Choudhurgiri, Sivakilla

Parallel Square Printer



```
package javafeatures.assignment;

import java.util.*;
import java.util.stream.*;

class ParallelSquarePrinter {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        List<Integer> num = new ArrayList<>();

        System.out.println("Enter how many numbers: ");
        int n = sc.nextInt();

        System.out.println("Enter the numbers:");
        for (int i = 0; i < n; i++) {
            num.add(sc.nextInt());
        }

        System.out.println("Squares using parallel stream");
        num.parallelStream()
            .forEach(x -> System.out.println(x * x));
    }
}
```

Enter how many numbers: 5
Enter the numbers:
3
4
7
5
9

Squares using parallel stream:
9
16
49
25
81