Assignment – IV

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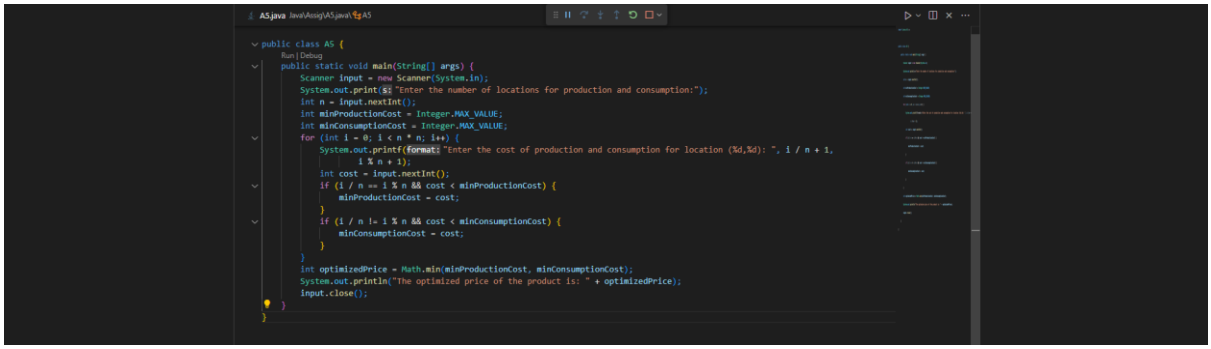
Question:

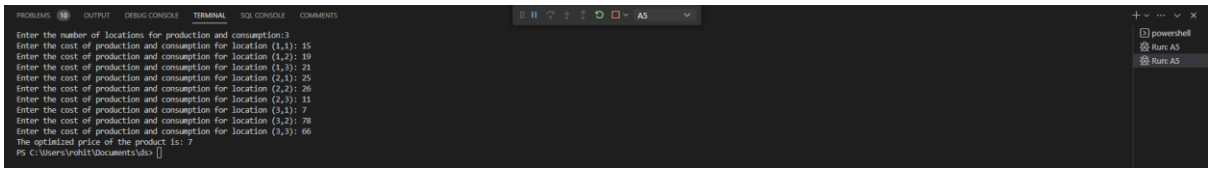
In a star company there are products being produced at ‘M’ and that are consumed at ‘N’ locations. The cost varies when they are produced and consumed at same location. Due to increase in competition in the similar product market it has become important now to find an optimized price of the product. Help the start company by providing the general solution for market price amount to be optimized. Keeping in mind the benefits of cost effectiveness of location of production and location of consumption of the product by the customers

Code:



```java
public class A5 {
    Run | Debug
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.print(s: "Enter the number of locations for production and consumption:");
        int n = input.nextInt();
        int minProductionCost = Integer.MAX_VALUE;
        int minConsumptionCost = Integer.MAX_VALUE;
        for (int i = 0; i < n * n; i++) {
            System.out.printf(format: "Enter the cost of production and consumption for location (%d,%d): ", i / n + 1,
                    i % n + 1);
            int cost = input.nextInt();
            if (i / n == i % n && cost < minProductionCost) {
                minProductionCost = cost;
            }
            if (i / n != i % n && cost < minConsumptionCost) {
                minConsumptionCost = cost;
            }
        }
        int optimizedPrice = Math.min(minProductionCost, minConsumptionCost);
        System.out.println("The optimized price of the product is: " + optimizedPrice);
        input.close();
    }
}
```

Output:



```
Enter the number of locations for production and consumption:3
Enter the cost of production and consumption for location (1,1): 15
Enter the cost of production and consumption for location (1,2): 19
Enter the cost of production and consumption for location (1,3): 21
Enter the cost of production and consumption for location (2,1): 25
Enter the cost of production and consumption for location (2,2): 26
Enter the cost of production and consumption for location (2,3): 11
Enter the cost of production and consumption for location (3,1): 7
Enter the cost of production and consumption for location (3,2): 78
Enter the cost of production and consumption for location (3,3): 66
The optimized price of the product is: 7
PS C:\Users\rohit\Documents\ds>
```

Repository:

https://github.com/kotarohs/java.git