Programiz PRO

Main.java   Output

```java
public class Company {
    public static void main(String[] args) {
        int[] list = {104, 105, 106, 107, 101, 102, 103};
        int targetID = 101;
        int index = binarySearch(list, targetID);
        System.out.println("Index of target ID " + targetID + "is " + index);
    }

    private static int binarySearch(int[] productIDs, int targetID) {
        int low = 0;
        int high = productIDs.length - 1;

        while (low <= high) {
            int midPosition = (low + high) / 2;
            int midNumber = productIDs[midPosition];

            if (targetID == midNumber) {
                return midPosition;
            }
            if (targetID < midNumber) {
                high = midPosition - 1;
            } else {
                low = midPosition + 1;
            }
        }

        return -1;
    }
}
```

Run