

```
import java.util.Scanner;

public class NextFit {

    // Function to implement the Next Fit algorithm
    public static void nextFit(int[] items, int binCapacity) {
        int binCount = 1; // Start with the first bin
        int currentBinWeight = 0; // Weight of the current bin

        System.out.println("Packing the items using Next Fit Algorithm:");

        for (int i = 0; i < items.length; i++) {
            if (currentBinWeight + items[i] <= binCapacity) {
                // If the item fits in the current bin
                currentBinWeight += items[i];
                System.out.println("Item " + (i + 1) + " (Weight: " + items[i] + ") placed in Bin " + binCount);
            } else {
                // Otherwise, move to the next bin
                binCount++;
                currentBinWeight = items[i]; // Start a new bin with the current item
                System.out.println("Item " + (i + 1) + " (Weight: " + items[i] + ") placed in Bin " + binCount);
            }
        }

        System.out.println("\nTotal number of bins used: " + binCount);
    }

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

```
// Get the number of items  
  
System.out.print("Enter the number of items: ");  
int n = scanner.nextInt();  
  
  
// Get the bin capacity  
  
System.out.print("Enter the bin capacity: ");  
int binCapacity = scanner.nextInt();  
  
  
// Get the weight of each item  
  
int[] items = new int[n];  
  
System.out.println("Enter the weights of the items:");  
for (int i = 0; i < n; i++) {  
    items[i] = scanner.nextInt();  
}  
  
  
// Call the next fit function  
  
nextFit(items, binCapacity);  
  
  
scanner.close();  
}  
}
```

```
java -cp /tmp/baDPexDwmT/NextFit
Enter the number of items: 2
Enter the bin capacity: 5
Enter the weights of the items:
21
1
Packing the items using Next Fit Algorithm:
Item 1 (Weight: 2) placed in Bin 1
Item 2 (Weight: 1) placed in Bin 1

Total number of bins used: 1

==== Code Execution Successful ====
```