

```

import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in); // scanner for user input
        int n = scan.nextInt(); // number of cookies
        int k = scan.nextInt(); // minimum sweetness
        int iterations = 0; // initialize iterations to 0
        PriorityQueue<Integer> minHeap = new PriorityQueue<Integer>(n); // use priority queue
        for min heap and comparable objects
        // for loop to add cookies to the heap from user input
        for(int i = 0; i < n; i++){
            int cookie = scan.nextInt(); // next user input of type int
            minHeap.add(cookie); // add the cookie to our heap
        }
        // loop while root/heap < min sweetness and there is more than 1 element
        while(minHeap.peek() < k && minHeap.size() > 1){ // peek() retrieves root/head
            int newCookie = minHeap.poll() + 2*minHeap.poll(); // poll retrieves and removes the
            root/head of our heap/queue
            minHeap.add(newCookie); // add the newly made cookie to our heap
            iterations++; // update iterations
        }
        if(minHeap.peek() >= k){ // if all cookies' sweetness > min sweetness
            System.out.println(iterations); // print number of iterations
        } else{
            System.out.println(-1); // else print -1
        }
    }
}

```