



```
public static int Minimum_Sum(int[] arr) {
    PriorityQueue<Integer> pq = new PriorityQueue<>();
    for (int i = 0; i < arr.length; i++) {
        pq.add(arr[i]);
    }
    int ans = 0;
    while (pq.size() > 1) {
        int a = pq.poll();
        int b = pq.poll();
        ans = ans + a + b;
        pq.add(a + b);
    }
    return ans;
}
```

