Cutting ropes

import java.util.\*;

public class MyClass {

public static void main(String args[])

{

int[] arr={1,2,3,4,5};

System.out.println(cuttingropes(arr));

}

public static int cuttingropes(int[] arr)

{

int sum=0;

PriorityQueue<Integer> heap=new PriorityQueue<>(new Comparator<Integer>(){

public int compare(int a,int b)

{

return a-b;

}

});

for(int x :arr)

{

heap.add(x);

}

while(heap.size()>=2)

{

int first=heap.peek();

heap.poll();

int second=heap.peek();

sum += first+second;

heap.add(sum);

}

return sum;

}

}