import java.util.Scanner;

public class Main {

public static String getSmallestAndLargest(String s, int k) {

String smallest = s.substring(0,k);

String largest = s.substring(0,k);

for(int i=1;i<=s.length()-k;i++){

String substr=s.substring(i,i+k);

if(substr.compareTo(smallest)<0){

smallest=substr;

}

if(substr.compareTo(largest)>0){

largest=substr;

}

}

return smallest + "\n" + largest;

}

public static void main(String[] args) {

Scanner scan = new Scanner(System.in);

String s = scan.next();

int k = scan.nextInt();

scan.close();

System.out.println(getSmallestAndLargest(s, k));

}

}