https://www.hackerrank.com/contests/openbracket-2017/challenges/finding-subsequence/problem

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static string solve(string s, int k)

{

// Complete this function

Dictionary<char, int> frec = new Dictionary<char, int>();

foreach (char ch in s)

{

if (frec.ContainsKey(ch))

{

frec[ch]++;

}

else

{

frec[ch] = 1;

}

}

Dictionary<char, List<int>> indices = new Dictionary<char, List<int>>();

for (int i = 0; i < s.Length; i++)

{

if (indices.ContainsKey(s[i]))

{

indices[s[i]].Add(i);

}

else

{

indices[s[i]] = new List<int>();

indices[s[i]].Add(i);

}

}

char[] arr = s.ToCharArray();

Array.Sort(arr);

string concat = "";

int indice = -1;

int busca = arr.Length - 1;

while (frec[arr[busca]] < k)

{

busca--;

}

indice = indices[arr[arr.Length - 1]][0];

concat += arr[arr.Length - 1];

//Console.WriteLine(indice);

for (int i = arr.Length - 1; i >= 0; i--)

{

List<int> listaIndices = indices[arr[i]];

for (int j = 0; j < listaIndices.Count; j++)

{

if (listaIndices[j] > indice)

{

concat += arr[i];

indice = listaIndices[j];

}

}

}

Dictionary<char, int> frecconcat = new Dictionary<char, int>();

foreach (char ch in concat)

{

if (frecconcat.ContainsKey(ch))

{

frecconcat[ch]++;

}

else

{

frecconcat[ch] = 1;

}

}

string ans = "";

foreach (char ch in concat)

{

if (frecconcat[ch] >= k)

{

ans += ch;

}

}

return ans;

}

static void Main(string[] args)

{

//string[] arr = { "rrnk", "rr", "rrank" };

//string s = "hackerrank";

//string s = "hackerrank";

//int k = 1;

//char[] ch = s.ToCharArray();

//Array.Sort(ch);

//Console.WriteLine(new string(ch));

//Console.WriteLine();

string s = "banana";

int k = 2;

Console.WriteLine(solve(s, k));

Console.ReadLine();

}

//static void Main(string[] args)

//{

// string[] arr = { "rrnk", "rr", "rrank" };

// //string[] arr = { "nnaa", "nn" };

// //string[] arr ={ "ackernk",

// // "ckr",

// // "ckrr",

// // "erak",

// // "rra",

// // "rrank",

// // "rrn",

// // "rrnk"};

// //string[] arr = { "nnc", "nnb" };

// Array.Sort(arr);

// for (int i = 0; i < arr.Length; i++)

// {

// Console.Write(arr[i] + " ");

// }

// Console.ReadLine();

//}

}

}