Multiply String

class Solution {

public String multiply(String num1, String num2) {

String n1 = new StringBuilder(num1).reverse().toString();

String n2 = new StringBuilder(num2).reverse().toString();

int[] d = new int[num1.length()+num2.length()];

//multiply each digit and sum at the corresponding positions

for(int i=0; i<n1.length(); i++){

for(int j=0; j<n2.length(); j++){

d[i+j] += (n1.charAt(i)-'0') \* (n2.charAt(j)-'0');

}

}

StringBuilder sb = new StringBuilder();

//calculate each digit

for(int i=0; i<d.length; i++){

int mod = d[i]%10;

int carry = d[i]/10;

if(i+1<d.length){

d[i+1] += carry;

}

sb.insert(0, mod);

}

//remove front 0's

while(sb.charAt(0) == '0' && sb.length()> 1){

sb.deleteCharAt(0);

}

return sb.toString();

}

}