Data Structures and Algo in Java - Day 34

import java.util.\*;

public class day34

{

public static void main (String args[])

{

// String s = "-2147483649";

// int result = myAtoi(s);

// System.out.println(result);

String s = "MCMXCIV";

romanNumber(s);

}

public static int myAtoi(String s)

{

int i = 0;

int n = s.length();

int sign = 1;

int result = 0;

while(i<n && s.charAt(i)==' ')

{

i++;

}

if(i<n && (s.charAt(i)=='+' || s.charAt(i)=='-'))

{

if(s.charAt(i)=='+')

{

sign = 1;

}

else

{

sign = -1;

}

i++;

}

while(i<n && Character.isDigit(s.charAt(i)))

{

int digit = s.charAt(i) - '0';

if(result>(Integer.MAX\_VALUE-digit)/10)

{

if(sign==1)

{

return Integer.MAX\_VALUE;

}

else

{

return Integer.MIN\_VALUE;

}

}

result = result \* 10 + digit;

i++;

}

return result \* sign;

}

public static void romanNumber(String s)

{

HashMap<Character,Integer> map = new HashMap<>();

map.put('I',1);

map.put('V',5);

map.put('X',10);

map.put('L',50);

map.put('C',100);

map.put('D',500);

map.put('M',1000);

int result = 0;

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

{

int value = map.get(s.charAt(i));

if(i+1 < s.length() && value < map.get(s.charAt(i+1)))

{

result = result - value;

}

else

{

result = result + value;

}

}

System.out.println(result);

}

}