Question: https://leetcode.com/problems/valid-number/

We start with trimming.

If we see [0-9] we reset the number flags.

We can only see . if we didn't see e or ..

We can only see e if we didn't see e but we did see a number. We reset numberAfterE flag.

We can only see + and - in the beginning and after an e

any other character break the validation.

At the and it is only valid if there was at least 1 number and if we did see an e then a number after it as well.

So basically the number should match this regular expression:

[-+]?(([0-9]+(.[0-9]\*)?)|.[0-9]+)(e[-+]?[0-9]+)?

Code:  
class Solution {

public boolean isNumber(String s) {

s = s.trim();

boolean pointSeen = false;

boolean eSeen = false;

boolean numberSeen = false;

boolean numberAfterE = true;

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

if('0' <= s.charAt(i) && s.charAt(i) <= '9') {

numberSeen = true;

numberAfterE = true;

} else if(s.charAt(i) == '.') {

if(eSeen || pointSeen) {

return false;

}

pointSeen = true;

} else if(s.charAt(i) == 'e' || s.charAt(i) == 'E') {

if(eSeen || !numberSeen) {

return false;

}

numberAfterE = false;

eSeen = true;

} else if(s.charAt(i) == '-' || s.charAt(i) == '+') {

if(i != 0 && s.charAt(i-1) != 'e') {

return false;

}

} else {

return false;

}

}

return numberSeen && numberAfterE;

}

}

Github Link :<https://lnkd.in/ecwtJeaz>