class Solution:

def lengthOfLongestSubstring(self, s: str) -> int:

n = len(s)

maxLength = 0

charSet = set()

left = 0

for right in range(n):

if s[right] not in charSet:

charSet.add(s[right])

maxLength = max(maxLength, right - left + 1)

else:

while s[right] in charSet:

charSet.remove(s[left])

left += 1

charSet.add(s[right])

return maxLength