

```
1 def isNumber(S) -> bool:
2     num,exp,sign,dec=False,False,False,False
3     for c in S:
4         if c>='0' and c<='9':
5             num=True
6         elif c=='e' or c=='E':
7             if exp or not num:
8                 return False
9             else:
10                exp,num,sign,dec=True,False,False,
False
11        elif c=='+' or c=='-':
12            if sign or num or dec:
13                return False
14            else:
15                sign=True
16        elif c=='.':
17            if dec or exp:
18                return False
19            else:
20                dec=True
21        else:
22            return False
23    return num
24 a=input("S=")
25 print(isNumber(a))
```