Exercise1

- Input a text in the console.
- Check if the text contains only sorted digits (from lowest to highest values)
- If so, write SORTED, otherwise write NOT SORTED

Q1: What will be the **result** for these outputs?

Input	Output
489	SORTED
4762	NOT SORTED
12	SORTED
1268	SORTED
1896	NOT SHORTED
1536	NOT SHORTED
2789	SHORTED

Q2: How many parts can you divide the problem into? Individual work.

1 variable (text) to store inpt
2 result to store shorted
3 use for loop
4 check condition text[i-1] < text[i]
5 put the result=not shorted
6 print(result)

Q3: Implement your code. Team (3 students) work.

```
text = input()
result=shorted
for i in range (len(text)-1):
      if text[i+1]<text[i]:
       result="NOT SORTED"
print(result)
```

Q4: Execute it in a table of execution. Team (3 students) work.

Step	result	text	i	Len[text]	if
1	shorted				
2		Input()			
3			0	Len(text)-1	
4					Text[i+1]<text[i]
5	Not shorted				
6	print				

Exercise2

- Input a text in the console.
- Control that the text is owning only "abc" pattern.
    - Print “OK” if so
    - Otherwise, print “WRONG”

Q1: What will be the **result** for these outputs?

Input	Output
abcd	WRONG
abcabc	OK
abc	OK
aabc	OK
abbc	WRONG
abcabcab	WRONG
abcdefg	WRONG

Q2: Create your flowchart structure with black boxes.

- Each student has to create his own.
- Share the result in group of 3.

1 use variable to store input Ex: text=input()
2 put the result =0
3 put count =0
4 use for loop and len(text) to count the text that you input
5 put count +=1
6 check condition if index >1
7 check condition again if text[i]==c and text[i-1]==b and text[i-2]==a
8 print Ok
9 Otherwise print Wrong

Q3: Implement it in Python. In group of 3.

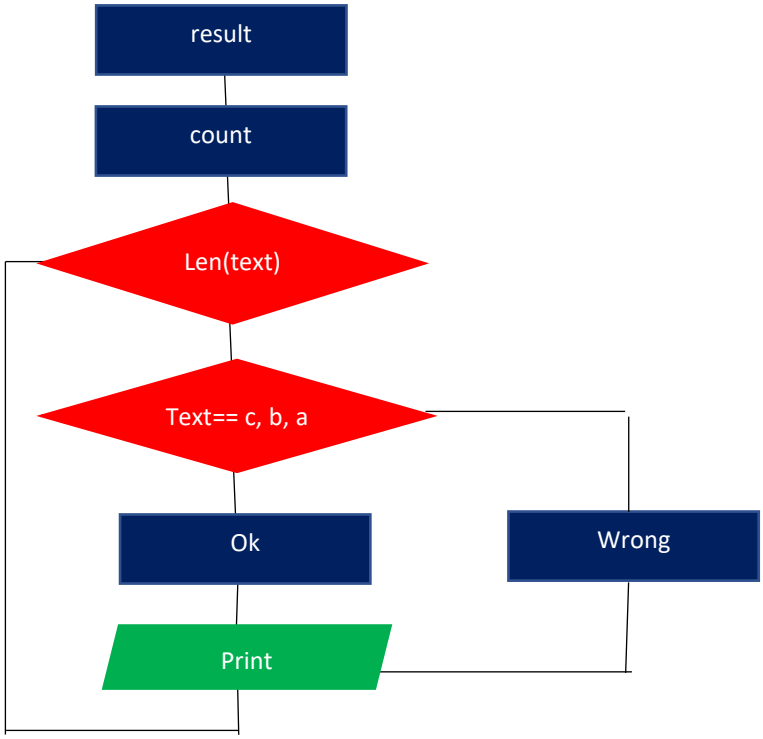
```
text=input()
result=0
count=0
for i in range(len(text)):
    count+=1
    if i>1:
        if text[i]=="c" and text[i-1]=="b" and text[i-2]=="a":
            result="Ok"
        else:
```

```
            result="wrong"
print(result)
```

Q4: Fill up the execution table. In group of 3.

Step	result	Count=0	i	Len(text)	if
1	0				
2		0			
3			0		
4		+=1			
5					i>1
6					Tex[i]==c and text[i-1]==b and text[i-2]==a
7	OK				
8					else
9	Wrong				

Q5: Present your flowchart structure to the class. In group of 3.



Exercise3

- Input a text in the console.
- Check that the text:
    - Has only *y*, between square brackets (need open AND close brackets).
    - Otherwise has *x*
- If the text is correct
    - Print “OK”
    - Otherwise, print “WRONG”

Q1: What will be the **result** for these outputs? Individual work

Input	Output
xxx[yyy]xxx	Ok
[yyy]xxx	OK
xxx[yyy	WRONG
xxxy	WRONG
[yy]	OK
xxx[yxyy]xxx	WRONG
xxxxx	WRONG

Q2: Which main instruction can solve the problem? What will it be used for? Group of 3 students.

Q3: Create a code to solve this problem. Group of 3 students.

```
Text=input()
isWrong=""
result=''
for I in range (len(text)):
        if text[i]=='x':
                result="OK"
        elif+1< len(text) and text[i]=="[" and text[i+1]=='y':
                result='OK'
        elif i+1< len(text) and text[i]=='y' and text[i=1]==']' or text[i+1]=='y' and I !=0 and text[i-1] != 'x':
                result='OK'
        elif text[i]==']' and text[i-1]=='y':
                result='OK'
        else:
                isWrong=True
if isWrong==True
        print("Wrong")
else:
        print(result)
```

Q4: Present your solution to the class. Group of 3 students.