EXERCISE 1

- Input one number word (ex: "1458756") in the console
- Print the sum of numbers which are **before** the first number 7.
- If there is not number 7, print the sum of all numbers.
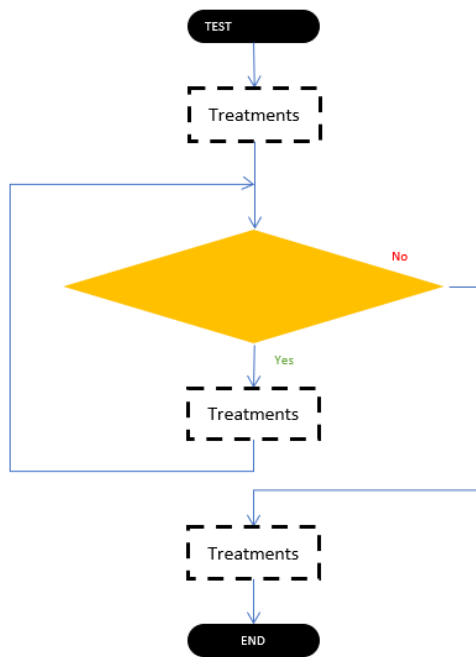
For the session, we will use black boxes:

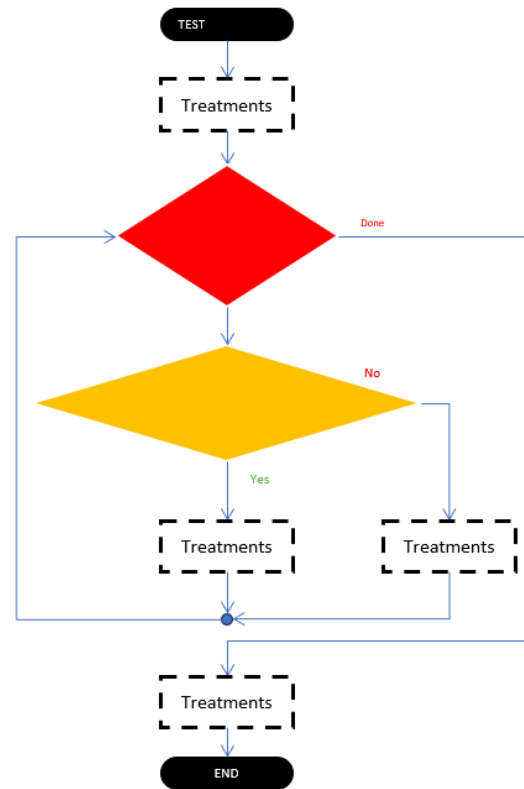 Box for zero or more statements

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

Input	Output
148756	13 (13 = 1 + 4 + 8)
426850	25 (25 = 4 + 2 + 6 + 8 + 5 + 0)
159753	
369874	
489632	

Q2: Choose a structure to solve this problem.

Structure 1

Structure 2

Q3: Complete the structure you chose with the missing treatments.

Q4: Find the bug on this code and test it

```python
word = input()
pos = 0
sum = 0
while pos < len(word) or word[pos] < 7:
    sum += int(word[pos])
    pos += 1
print(sum)
```

Q5: Implement another version using a FOR loop, and test it

EXERCISE 2

- Input one number word (ex: "1458756") in the console
- Print the sum of numbers which are **after** the first number 7.
- If there is not number 7, print 0

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

Input	Output
148756	11
426850	
159753	
369874	

Q2: Analyze **the symbols** you need to solve this problem.

Element		Do you need it?	For what?
Action			
Decision			
Repeat			
Input / Output			

Q3: Change the code of exercise 1 (Q2) to solve this similar problem.

EXERCISE 3

- Input a **text** in the console.
- Count the number of times the "ab" pattern appears in a string.

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

Input	Output
abcdvqzaxb	1
abacab	1
babababacab	3
abdvcbaac	
acb	
abcabcabc	
bcacbab	

Q2: Analyse the problem and propose a flowchart.

Q3: Execute flowchart and complete the execution table.

STEP	....	...
1		
2		
...		

Q4: Discuss, in a group of 3, your choice.