TUESDAY

1- What will be print by this code ?

```python
isAdult = False
age = 25
if age >= 18:
  isAdult = True

if not(isAdult):
  print("Answer A")
else:
  print("Answer B")
```

Answer B

2- What will be print by this code ?

```python
var1 = 5
var2 = 3
var3 = 2
var4 = 6

if (var1==5 and var2==3) or (var3==2 and var4==7):
  print("Answer A")
else:
  print("Answer B")
```

Answer A

3- What will be print by this code ?

```python
var1 = "5"
var2 = int(var1)
var3 = var2 / 2
var4 = var3 == 2
var5 = str(var4)

print(type(var1))
print(type(var2))
print(type(var3))
print(type(var4))
print(type(var5))
```

<class 'str'>
<class 'int'>
<class 'float'>
<class 'bool'>
<class 'str'>

4- What will be print by this code ?

```
text = "cambodia"
print(text[3:6])
print(text[6:])
for n in range (len(text), 4*5, 4) :
   print(n)
```

bod
ia
8
12
16

5- What will be print by this code ?

```
text = "hello;all"
findSemiColumn = False
result1 = ""
result2 = ""
for i in range (len(text)):
  if text[i] == ";":
    findSemiColumn = True
  elif findSemiColumn:
    result2 = result2 + "a"
  else:
    result1 = result1 + text[i]
print(result1)
print(result2)
```

hello
aaa

WEDNESDAY

WHAT YOUR PROGRAM SHALL DO
- Enter a text in the console 　　**CONSOLE** : console shall display Enter a text : Change the layout of this text following this rules: - The first letter must be transformed into uppercase - After a "," we go to a new line - After a "." we go to a new line and change the next letter to uppercase - All "s" should be transformed into "$" ➔ The text that we will input should contain only lowercase characters and "," or "." or "?"

CORRECTION

```python
text = input("Enter text: ")
newText = ""

# We use this boolean in case we need to set the upper case after a "."""
# We set it to true since the first char shall be set to upper
nextCharToUpper = True

for index in range(len(text)):
    currentChar = text[index]

    # If needed we transform the current case to upper
    if nextCharToUpper:
        currentChar = currentChar.upper()
        nextCharToUpper = False

    # If coma, we go to the next line
    if currentChar == ",":
        newText = newText + ",\n"

    # If dot, we go to the next line and we will set next car to uppercase
    elif currentChar == ".":
        newText = newText + ".\n"
        nextCharToUpper = True

    # If 'S' or 's' we transform it into '$'
    elif currentChar.upper() == "S":
        newText = newText + "$"
    else:
        newText = newText + currentChar

print(newText)
```

THURSDAY

WHAT YOUR PROGRAM SHALL DO

-    Enter a number
        CONSOLE : console shall display Enter a number:
 	
-    The code print the sum of all entered numbers
        CONSOLE : console shall display TOTAL: <total>

->The program ask number and print total until the user input "END"

->If the user enter a not numeric value (for example "aa7b"), we will just add 0
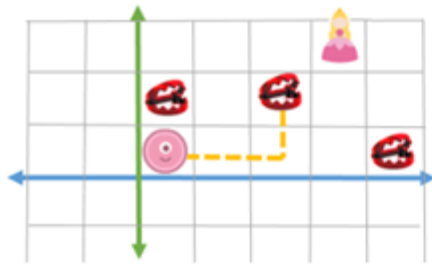
CORRECTION

```
sum = 0
endOfInput = False

while not endOfInput:
    text = str(input("Enter Number: "))
    isANumber = text.isnumeric() or (text[0] == "-" and text[1:].isnumeric())
    if isANumber:
        sum = sum + int(text)
    if text == "END":
        endOfInput = True
    else:
        print("TOTAL: " + str(sum))
```
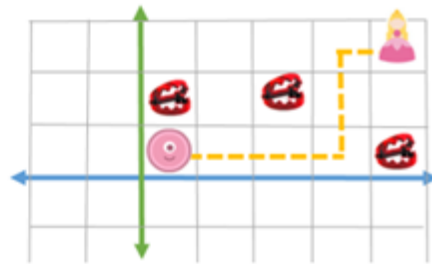
> Princess X : 3
> Princess Y : 2
> RRUUR
> You fell into a trap

Because RIGHT + RIGHT + UP
will make BALOOK fell into a trap
We don't care about the movement after
R R U because we already fall in trap

> Princess X : 4
> Princess Y : 2
> RRRUUR
> Princess is saved!

Because RIGHT + RIGHT + RIGHT +
UP + UP + RIGHT will bring BALOOK
to the princess

- Traps are always at positions (0, 1), (2, 1), (4, 0)
- The player wins if the list of move action brings Balook to the princess **without falling in a trap during the travel!!!**

WHAT YOUR PROGRAMM SHALL DO
Enter the **position of the princess** (X first then Y) :   • CONSOLE : console shall display : Princess X :   • CONSOLE : console shall display : Princess Y :   Then enter the list of actions :   • CONSOLE : console shall display : Actions: • Enter one string (the actions): which shall contain only: L, R, U, D   -Print "WIN" if Balook stop on the princess cell without fall in trap on the road   -Otherwise print:" LOOSE"

EXAMPLES	
CONSOLE	EXPLANATION
>Princess X : 4 >Princess Y : 1 >Actions : LUURRRRRD >WIN	We entered 1 LEFT 2 UP and 5 RIGHT - the positions will be: (0;0), (-1;0), (-1;1), (-1;2), (0;2), (1;2), (2;2), (3;2), (4;2) and (4;1) at the end We never fall in trap and we finish at the princess position, so we print "WIN"
>Princess X : 0 >Princess Y : 2 >Actions : UU >LOOSE	We entered 2 UP - the positions will be: (0;0), (0;1), and (0;2) at the end At (0;1) we fall into a trap, so we print "LOOSE"

CORRECTION

```python
princessX = int(input(">Princess X: "))
princessY = int(input(">Princess Y: "))
actionsString = input(">Actions: ")
x = 0
y = 0
balookIsDead=False
for index in range(len(actionsString)):
    action = actionsString[index]
    if action == "R":
      x = x + 1
    elif action == "L":
      x = x - 1
    elif action == "U":
      y = y + 1
    elif action == "D":
      y = y - 1
    trap1=(x == 0 and y == 1)
    trap2=(x == 2 and y == 1)
    trap3=(x == 4 and y == 0)
    if trap1 or trap2 or trap3:
      balookIsDead = True
savePrincess=(x == princessX) and (y == princessY)
if savePrincess and not balookIsDead:
 print(">WIN")
else:
 print(">LOOSE")
```