# EXECUTE & BUGS

Execute mentally the below code and write, for each step of execution the value of each variable

* *If the variable is not defined yet, write “?”*

## EXECUTE-9

x=0

text=""

while x<3:

text = text+"x"

x = x+1

print(text)

print(x)

|  |  |  |  |
| --- | --- | --- | --- |
| STEP | x | text | CONSOLE |
|  | 0 |  |  |
|  |  | “ “ |  |
|  |  |  |  |
|  |  | Text + ”x” |  |
|  | X = x+1 |  |  |
|  |  |  | Xxx  3 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## EXECUTE-10

x=0

text = ""

isLess = True

while isLess:

text = text+"x"

x = x+1

if x==5:

isLess = False

print(text)

print(x)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| STEP | x | isLess | text | CONSOLE |
|  | 0 |  |  |  |
|  |  |  | “ “ |  |
|  |  | True |  |  |
|  |  |  |  |  |
|  |  |  | Text + “x” |  |
|  | X+1 |  |  |  |
|  |  |  |  |  |
|  |  | False |  |  |
|  |  |  |  | Xxxxx  5 |
|  |  |  |  |  |

## EXECUTE-11

x=0

text = ""

isLess = True

while isLess:

text = text+"x"

x = x+1

if x==5:

isLess = False

print(text)

print(x)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| STEP | x | isLess | text | CONSOLE |
|  | 0 |  |  |  |
|  |  |  | “ “ |  |
|  |  | True |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

# BUGS

* **Find the bug** in each exercise
* **Underline the bug and write the reason of the bug**

EXAMPLE

values = ["a", "b", c"]

for value of values :

if value > 0 : 🡸 cannot compare a string with a number

print("found")

# BUG 1

arrayToSum = [1, 3, 9, 10, 20]

total = 0

i = 0

while i < len(arrayToSum) :

total += arrayToSum[i]

print(total)

# BUG 2

def data() :

    thing = "foo"

data()

print(thing)

ត្រូវហៅ​ data() មកប្រើ

def data() :

thing = “ foo”

print (data())

# BUG 3

array = [-5, 2, 9, -10, 0]

i = 0

while i < len(array) :

    print(array[i])

i+=1

# BUG 4

i = int(input(“Choose a number”))

if i < 0 :

print(“Your number is negative”)

elif i > 5 :

print(“Your number is greater than 5”)

elif i > 10 :

print(“Your number is greater than 10”)

else :

print(“Your number is between 0 and 5”)

ការដាក់លក្ខខណ្ឌ​ i>5 វានិងមិនចុះមកសិក្សាទៀតទេ​យើងត្រូវប្ដូរសញ្ញា(< > )

# EXERCICE 5

numbers = [55, 4, 92, 1, 104, 64, 73, 99, 20]

max\_value = numbers[0]

for num in numbers :

    if num < max\_value :

        max\_value = num

print('Maximum value:', max\_value)

ប្រសិនគេប្រកាស​ចង់បាន array(numbers[0]) យើង print​ យកដោយមិនប្រើ for loop ឡើយ

# EXERCICE 6

array2D = [[1,2,3], [4,5,6], [7,8,9]]

for i in array2D :

    for j in range(len(i)) :

        print(array2D[i][j])

# EXERCICE 7

array = [1, 3, 9, 3, 20]

numberOf3 = 0

for num in array :

    if num == '3':

        numberOf3 += 1

print(numberOf3)