# EXECUTION

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-1

a = 1

b = 3

for i in range(2) :

a += b

b += i

print(a+b)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| STEP | a | b | i | CONSOLE (STDOUT) |
|  | 1 | 3 | 0 |  |
|  | 3+1=4 | 3+0=3 | 1 |  |
|  | 4+3=7 | 3+1=4 | 2 | 11 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## EXECUTE-2

array2D = [[1, 2], [3, 4]]

for a in array2D :

    for b in range(len(a)) :

        c = a[b]

        print(c)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| STEP | a | b | c | CONSOLE |
|  | [1, 2] | 0 | 1 |  |
|  | [1, 2] | 1 | 2 |  |
|  | [3, 4] | 0 | 3 |  |
|  | [3, 4] | 1 | 4 | 1  2  3  4 |
|  |  |  |  |  |

## EXECUTE-3

a = 2

b = 2

i = 0

while i < a :

a += 1

i += b

|  |  |  |  |
| --- | --- | --- | --- |
| STEP | a | b | i |
|  | 2 | 2 | 0 |
|  | 2+1=3 | 2 | 2 |
|  | 4 | 2 | 4 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# BUGS

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

# EXERCICE 5

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

for i in range(len(array)) :

print(i[0])

# EXERCICE 6

def double(a) :

    res = 2\*a;

res = double(4);

print(res);

print :none

because :not return

# EXERCICE 7

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

total = 0

for num in arrayToSum :

    total += arrayToSum[i]

print(total)

sting and integer can’t sum

# EXERCICE 8

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

array[len(array)] = array[-len(array)]

index out of range

can’t

# EXERCICE 9

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

while i < len(array) :

    print(array[i])

i+=1

i Not Found