# 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 | ? |  |
|  | 4 | 3 | 0 |  |
|  | 7 | 4 | 1 | 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 |
|  | [1,2] | 1 | 2 | 2 |
|  | [3,4] | 0 | 3 | 3 |
|  | [3,4] | 1 | 4 | 4 |
|  |  |  |  |  |

## EXECUTE-3

a = 2

b = 2

i = 0

while i < a :

a += 1

i += b

|  |  |  |  |
| --- | --- | --- | --- |
| STEP | a | b | i |
|  | 2 | 2 | 0 |
|  | 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]) we can’t use “i” here because it’s integer.



# EXERCICE 6

def double(a) :

    res = 2\*a

 No return

res = double(4)

print(res)

# EXERCICE 7

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

total = 0



for num in arrayToSum :

    total += arrayToSum[i] Integer can’t sum with string and “i” is not identified



print(total)

# EXERCICE 8

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

array[len(array)] = array[-len(array)] index out of range



# EXERCICE 9

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

while i < len(array) :



    print(array[i]) “i” is not identified



i+=1