

Accenture Sections	Information	Questions and Time
Cognitive Ability	<ul style="list-style-type: none"><li>English Ability</li><li>Critical Thinking and Problem Solving</li><li>Abstract Reasoning</li></ul>	50 Ques in 50 mins
Technical Assessment	<ul style="list-style-type: none"><li>Common Application and MS Office</li><li>Pseudo Code</li><li>Fundamental of Networking, Security and Cloud</li></ul>	40 Ques in 40 mins
Coding Round	<ul style="list-style-type: none"><li>C</li><li>C++</li><li>Dot Net</li><li>JAVA</li><li>Python</li></ul>	2 Ques in 45 mins

# DEBUG WITH SHUBHAM

Accenture Technical Assessment Detailed Overview

Pseudo Code



<https://www.youtube.com/@DebugWithShubham>



<https://www.linkedin.com/in/debugwithshubham/>



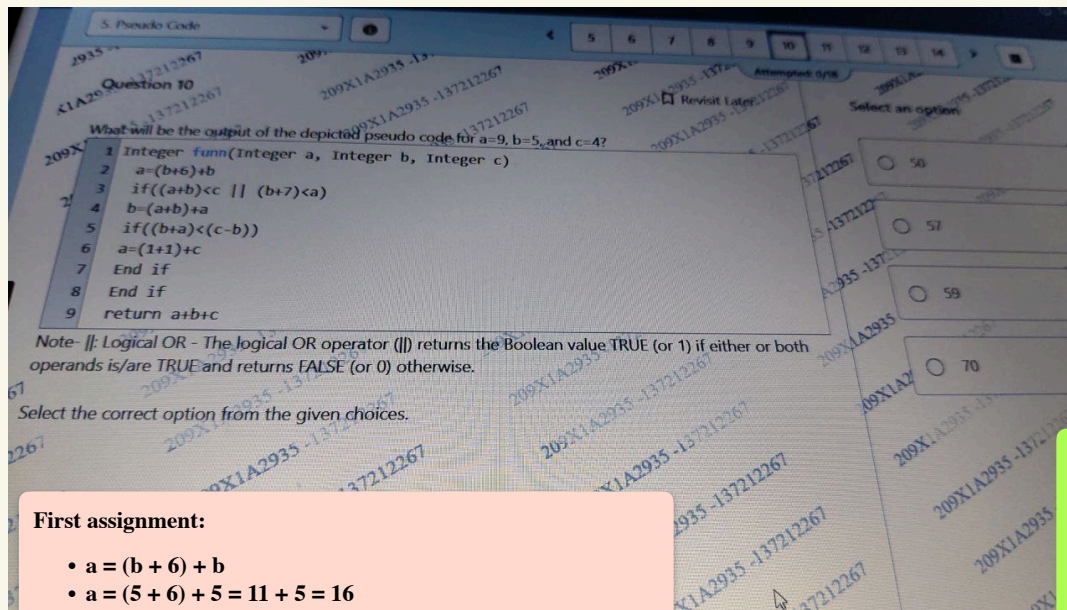
<https://www.instagram.com/debugwithshubham/>



<https://topmate.io/debugwithshubham>



<https://t.me/debugwithshubham>



#### First assignment:

- $a = (b + 6) + b$
- $a = (5 + 6) + 5 = 11 + 5 = 16$
- Now,  $a = 16$ ,  $b = 5$ , and  $c = 4$ .

#### First condition check:

- if  $((a + b) < c \text{ || } (b + 7) < a)$
- Substituting the values: if  $((16 + 5) < 4 \text{ || } (5 + 7) < 16)$
- if  $(21 < 4 \text{ || } 12 < 16) \rightarrow \text{false || true} \rightarrow \text{true}$
- Since this condition is true, we proceed into the if block.

#### Assignment inside the first if block:

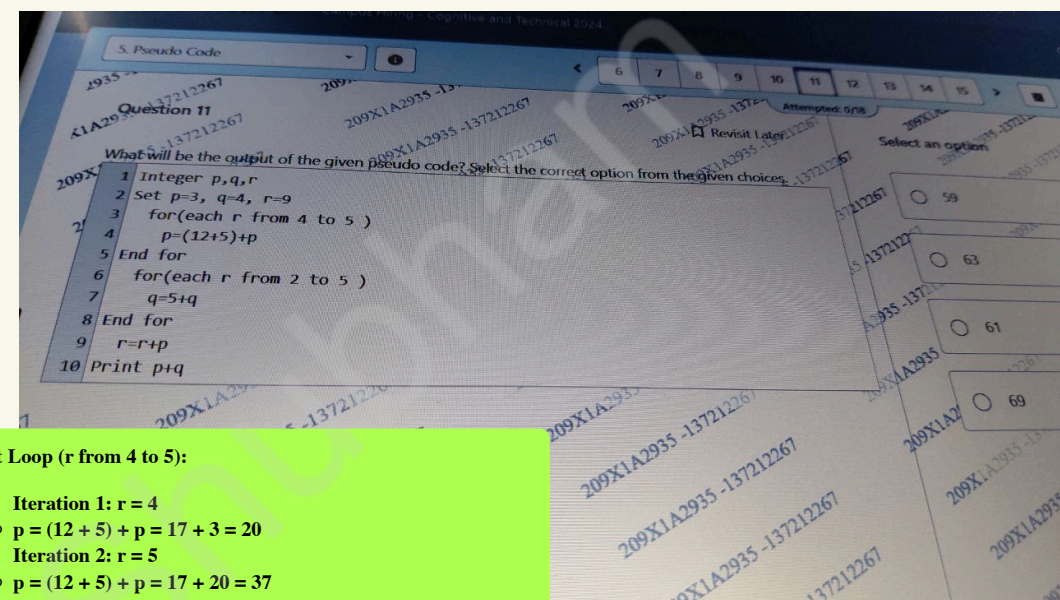
- $b = (a + b) + a$
- $b = (16 + 5) + 16 = 21 + 16 = 37$
- Now,  $b = 37$ ,  $a = 16$ , and  $c = 4$ .

#### Second condition check:

- if  $((b + a) < (c - b))$
- Substituting the values: if  $((37 + 16) < (4 - 37))$
- if  $(53 < -33) \rightarrow \text{false}$
- Since this condition is false, the second if block is skipped.

#### Return the result:

- The function returns  $a + b + c$
- $a + b + c = 16 + 37 + 4 = 57$



#### First Loop (r from 4 to 5):

- Iteration 1:  $r = 4$ 
  - $p = (12 + 5) + p = 17 + 3 = 20$
- Iteration 2:  $r = 5$ 
  - $p = (12 + 5) + p = 17 + 20 = 37$

#### At the end of the first loop:

- $p = 37$

#### Second Loop (r from 2 to 5):

- Iteration 1:  $r = 2$ 
  - $q = 5 + q = 5 + 4 = 9$
- Iteration 2:  $r = 3$ 
  - $q = 5 + q = 5 + 9 = 14$
- Iteration 3:  $r = 4$ 
  - $q = 5 + q = 5 + 14 = 19$
- Iteration 4:  $r = 5$ 
  - $q = 5 + q = 5 + 19 = 24$

#### At the end of the second loop:

- $q = 24$

#### After the Loops:

- $r = r + p = 5 + 37 = 42$

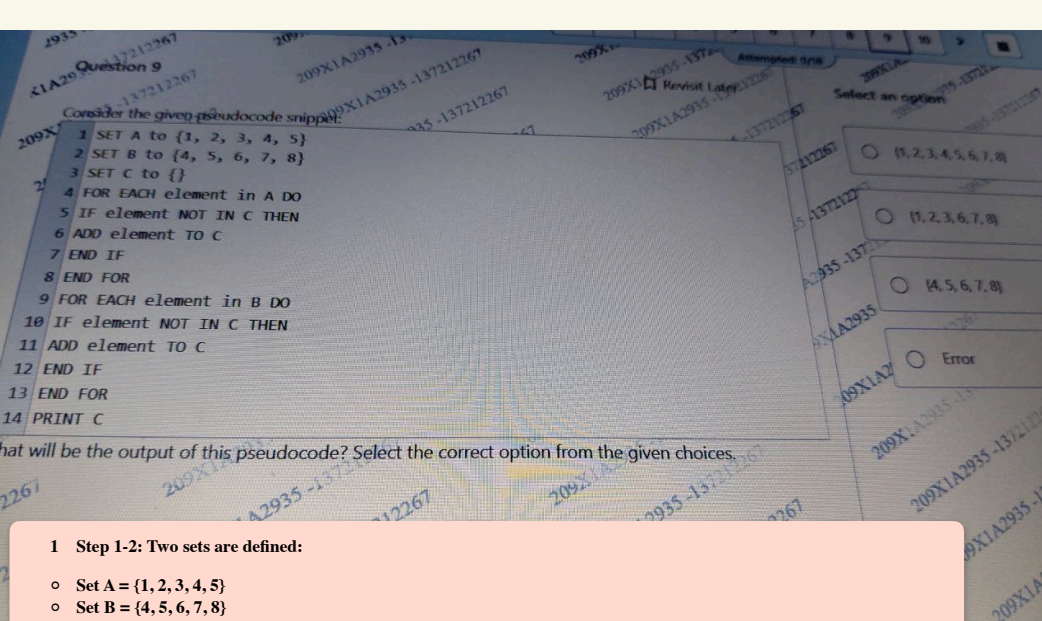
#### Final Calculation:

- $p + q = 37 + 24 = 61$

#### Correct Option:

- The correct option is c) 61.





**1 Step 1-2: Two sets are defined:**

- Set A = {1, 2, 3, 4, 5}
- Set B = {4, 5, 6, 7, 8}

**2 Step 3: An empty set C = {} is initialized.**

**3 Step 4-8: A FOR loop runs through each element in set A, and if the element is not already in set C, it is added to C.**

- After processing set A, set C = {1, 2, 3, 4, 5}.

**4 Step 9-13: Another FOR loop runs through each element in set B, and if the element is not already in set C, it is added to C.**

- Set B = {4, 5, 6, 7, 8}. Since 4 and 5 are already in C, only 6, 7, and 8 are added.
- After processing set B, set C = {1, 2, 3, 4, 5, 6, 7, 8}.

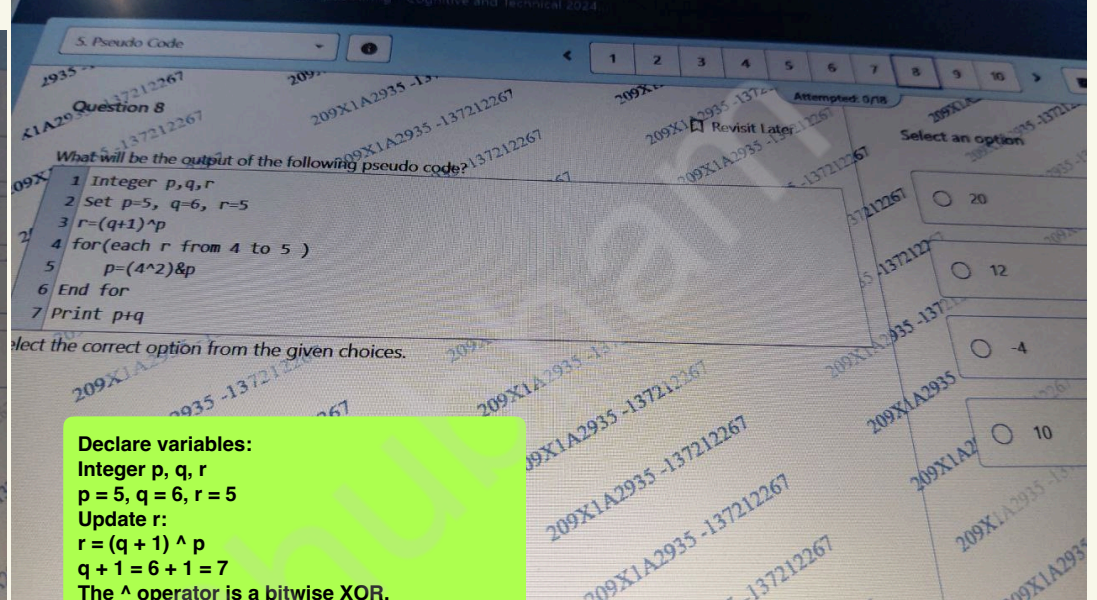
**5 Step 14: The program prints set C.**

**Final Output:**

The final set C will be: {1, 2, 3, 4, 5, 6, 7, 8}.

**Correct Option:**

- {1, 2, 3, 4, 5, 6, 7, 8}



**Declare variables:**

Integer p, q, r

p = 5, q = 6, r = 5

Update r:

$r = (q + 1) \wedge p$

$q + 1 = 6 + 1 = 7$

The  $\wedge$  operator is a bitwise XOR.

$r = 7 \wedge 5$

Binary of 7: 0111

Binary of 5: 0101

$0111 \wedge 0101 = 0010$ , which is 2

So,  $r = 2$ .

Loop for r from 4 to 5:

This loop iterates for  $r = 4$  and  $r = 5$ .

First iteration ( $r = 4$ ):

$p = (4 \wedge 2) \& p$

$4 \wedge 2 = 6$  (binary:  $0100 \wedge 0010 = 0110$ )

$6 \& p = 6 \& 5 = 4$  (binary:  $0110 \& 0101 = 0100$ )

Now,  $p = 4$ .

Second iteration ( $r = 5$ ):

Again,  $p = (4 \wedge 2) \& p$

$4 \wedge 2$  is still 6

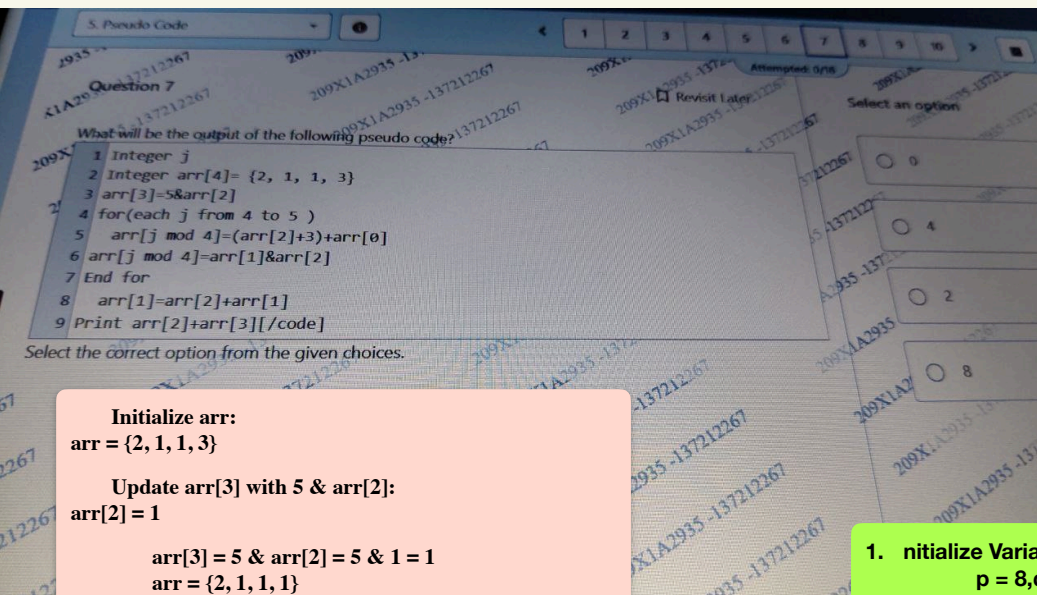
$6 \& p = 6 \& 4 = 4$  (binary:  $0110 \& 0100 = 0100$ )

So, p remains 4.

Print p + q:

At this point,  $p = 4$  and  $q = 6$ .

$p + q = 4 + 6 = 10$ .



**Initialize arr:**  
 $\text{arr} = \{2, 1, 1, 3\}$

**Update arr[3] with 5 & arr[2]:**  
 $\text{arr}[2] = 1$

$\text{arr}[3] = 5 \ \& \ \text{arr}[2] = 5 \ \& \ 1 = 1$   
 $\text{arr} = \{2, 1, 1, 1\}$

**Iterate j from 4 to 5:**

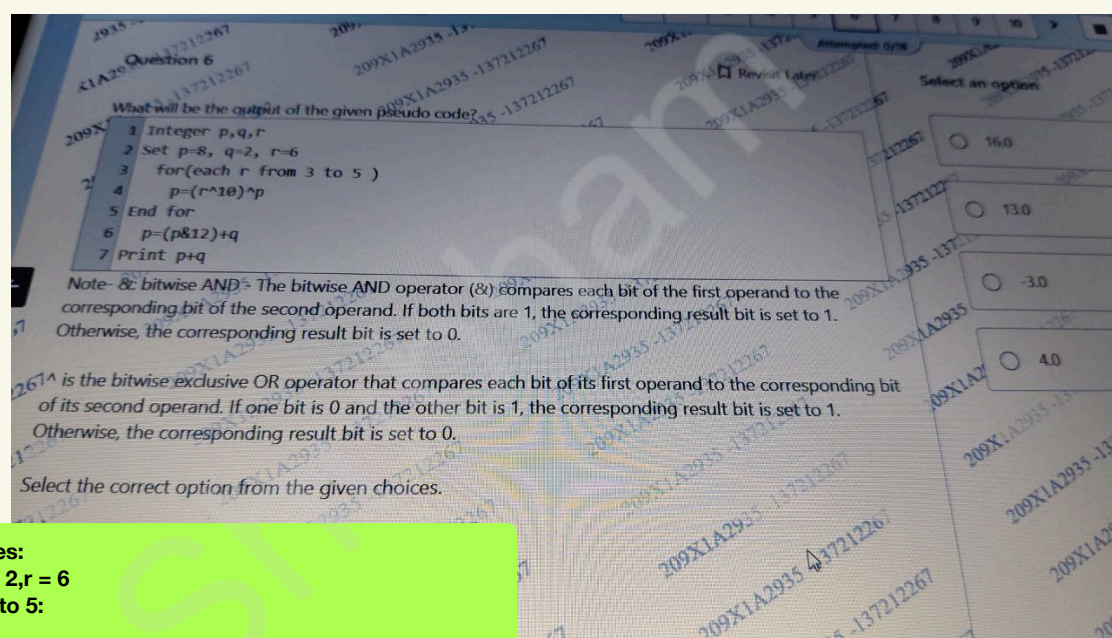
**For j = 4:**  
 $j \bmod 4 = 4 \bmod 4 = 0$   
 $\text{arr}[0] = (\text{arr}[2] + 3) + \text{arr}[0] = (1 + 3) + 2 = 6$   
 $\text{arr}[0] = 6$   
 $\text{arr} = \{6, 1, 1, 1\}$   
 $\text{arr}[0] = \text{arr}[1] \ \& \ \text{arr}[2] = 1 \ \& \ 1 = 1$   
 $\text{arr} = \{1, 1, 1, 1\}$

**For j = 5:**  
 $j \bmod 4 = 5 \bmod 4 = 1$   
 $\text{arr}[1] = (\text{arr}[2] + 3) + \text{arr}[0] = (1 + 3) + 1 = 5$   
 $\text{arr}[1] = 5$   
 $\text{arr} = \{1, 5, 1, 1\}$   
 $\text{arr}[1] = \text{arr}[1] \ \& \ \text{arr}[2] = 5 \ \& \ 1 = 1$   
 $\text{arr} = \{1, 1, 1, 1\}$   
**Update arr[1]:**  
 $\text{arr}[1] = \text{arr}[2] + \text{arr}[1] = 1 + 1 = 2$

$\text{arr} = \{1, 2, 1, 1\}$

4. **Print arr[2] + arr[3]:**  
 $\text{arr}[2] + \text{arr}[3] = 1 + 1 = 2$

The final output of the print statement is 2.



1. **initialize Variables:**  
 $p = 8, q = 2, r = 6$

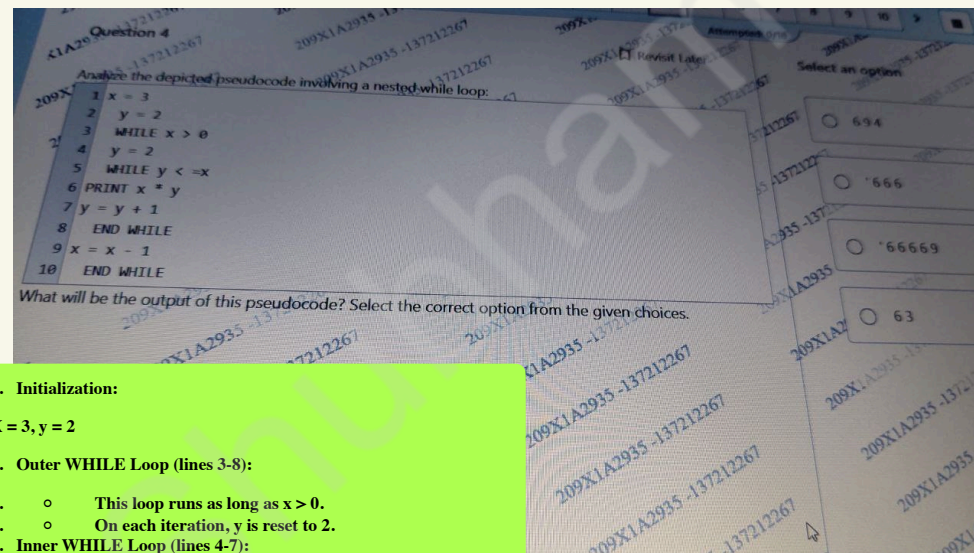
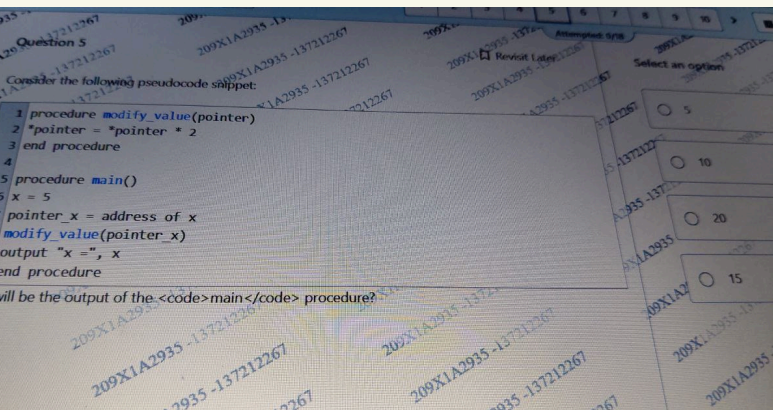
2. **Iterate r from 3 to 5:**  
**For r = 3:**  
 $p = (3 \wedge 10) \wedge p$   
**Calculate  $3 \wedge 10$  using bitwise XOR:**  
 $3 \text{ (0011 in binary) XOR } 10 \text{ (1010 in binary)} = 1001 \text{ (9 in decimal)}$   
 $9 \wedge 8 = 1001 \text{ (9) XOR } 1000 \text{ (8)} = 0001 \text{ (1 in decimal)}$   
 $p = 1$   
**For r = 4:**  
 $p = (4 \wedge 10) \wedge p$   
**Calculate  $4 \wedge 10$ :**  
 $4 \text{ (0100 in binary) XOR } 10 \text{ (1010 in binary)} = 1110 \text{ (14 in decimal)}$   
 $14 \wedge 1 = 1110 \text{ (14) XOR } 0001 \text{ (1)} = 1111 \text{ (15 in decimal)}$   
 $p = 15$   
**For r = 5:**  
 $p = (5 \wedge 10) \wedge p$   
**Calculate  $5 \wedge 10$ :**  
 $5 \text{ (0101 in binary) XOR } 10 \text{ (1010 in binary)} = 1111 \text{ (15 in decimal)}$   
 $15 \wedge 15 = 1111 \text{ (15) XOR } 1111 \text{ (15)} = 0000 \text{ (0 in decimal)}$   
 $p = 0$   
**Update p:**  
 $p = (p \ \& \ 12) + q$

**Calculate p & 12:**  
 $p = 0 \text{ (0000 in binary)}$   
 $12 = 0000 \ 1100 \text{ (in binary)}$   
 $p \ \& \ 12 = 0000 \text{ (0 in decimal)}$   
 $p = 0 + 2 = 2$

4. **Print p + q:**  
 $p + q = 2 + 2 = 4$

The final output of the print statement is 4.





#### 1. Initialization:

$x = 3, y = 2$

#### 1. Outer WHILE Loop (lines 3-8):

2.
  - o This loop runs as long as  $x > 0$ .
3.
  - o On each iteration, y is reset to 2.
4. Inner WHILE Loop (lines 4-7):
  5.
    - o This loop runs while  $y \leq x$ .
  6.
    - o Inside this loop, the product of x and y is printed.
  7.
    - o y is incremented by 1 in each iteration.
  8. Update x (line 8):
    9.
      - o After the inner loop finishes, x is decremented by 1.

Execution Flow:

Initial values:  $x = 3, y = 2$

#### Outer Loop Iterations:

- First Iteration ( $x = 3$ ):
  - o Inner Loop: y starts at 2 and increments while  $y \leq x$ .
    - Prints  $3 * 2$  (6)
    - Increments y to 3, then prints  $3 * 3$  (9)
    - Increments y to 4, which is no longer  $\leq 3$ , so the loop ends.
  - Second Iteration ( $x = 2$ ):
    - o Inner Loop: y is reset to 2 and increments while  $y \leq x$ .
      - Prints  $2 * 2$  (4)
      - Increments y to 3, which is no longer  $\leq 2$ , so the loop ends.
    - Third Iteration ( $x = 1$ ):
      - o Inner Loop: y is reset to 2 and increments while  $y \leq x$ .
        - Since y (2) is not  $\leq 1$ , the inner loop does not execute.
      - After the third iteration, x is decremented to 0 and the outer loop ends.

#### Summary of Outputs:

- The output : 6 9 4

#### 1. Initialization:

$x = 5$

#### 2. Pointer Assignment:

`pointer_ = address of x`

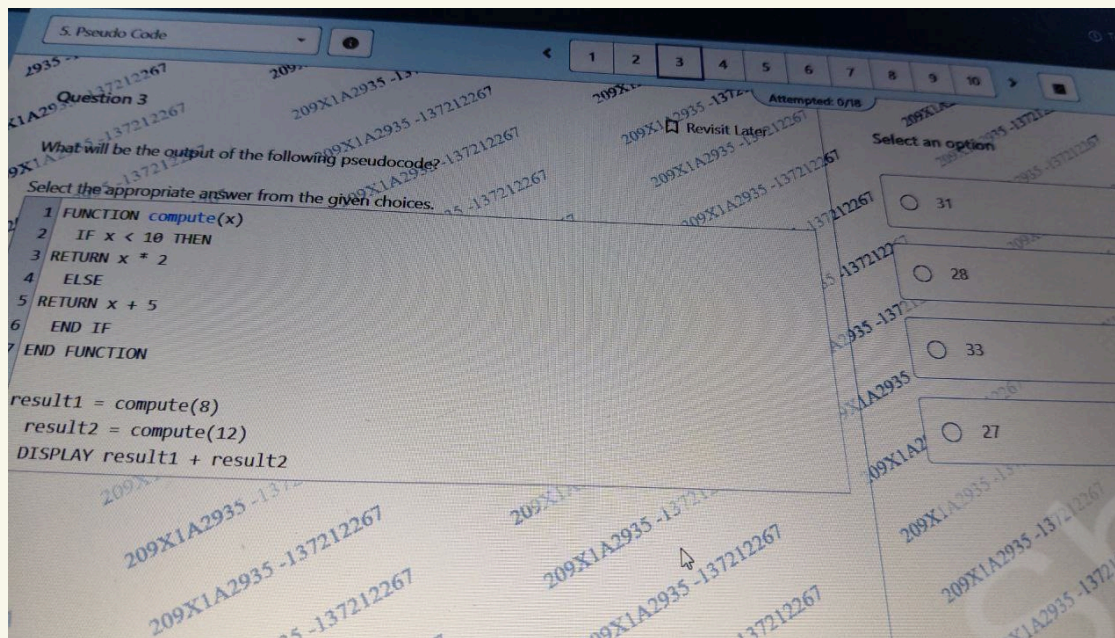
#### 3. Call to `modify_value(pointer_)`:

4.
  - o `modify_value` receives `pointer_`, which points to x.
5.
  - o Inside `modify_value`, `*pointer` is x, so `*pointer = *pointer * 2` updates x to  $5 * 2 = 10$ .
6. Print Statement:  
`output "x =", 10`

The corrected output of the main procedure is:

$x = 10$





#### Function Definition (compute(x)):

- **Input:** x, a number.
- **Output:**
  - If x is less than 10, the function returns  $x * 2$ .
  - Otherwise, it returns  $x + 5$ .

#### Function Calls:

- **result1 = compute(8):**
  - Since  $8 < 10$ , the function returns  $8 * 2 = 16$ .
- **result2 = compute(12):**
  - Since  $12 \geq 10$ , the function returns  $12 + 5 = 17$ .

#### Display Result:

- **DISPLAY result1 + result2:**
  - This displays the sum of result1 and result2.

result =  $16 + 17 = 33$