

Participant-2

SUMMARY KEYWORDS

array, initialized, loop, average, snippets, incremented, function, sum, length, counter, algorithm, print, characters, integers, logic, jan, sammy, smaller, equal, formulas

SPEAKERS

Participant, Observer

Participant

we are calling a public class average

Participant

then we are assigning an array of integers

Observer

you have to speak what are you thinking about?

Participant

passing the array of integers. To the function array of integer array average. So then we are initializing the counter value with zero. The sum value is zero.

Participant

So then we are calling a while loop . And the length of the array is five in the down the public static void we have initialized an array of array values array values from one to five. So the while loop will execute from zero smaller than five means like five times it will be start from zero plus means starts from zero, sum value will be incremented for every loop. So the initially the sample is zero. And the first loop will start with equal to zero plus zero plus the array value array of zero. So it will be one. sum value would be one so counter value would be one in the first one.

Participant

Again the counter value is incremented. And if we go to the while loop, again, the value would be one smaller than five and it goes on like the like the same thing, sum would be incremented with one and the counter value is incremented. It will have been goes to two when it reaches. Okay, the next is same, like one plus two, again, it is incremented and until the control reaches , then it will exit the while loop. And it will print the statement.

Participant

Oh, I think it will print the solution answer as 17 . It would print the value 17

Participant

Going to the next question. I can see one What are we going to do now? J

Participant

Going ahead with the average number of characters algorithm. I'm just having a look. So, here in the array of string, we are initializing the names 4 names which are Jan, Sammy, anna and Lee. And we are printing out the characters which are initialized in the above array of strings.

Participant

what's happening here is these array is passed to the function array average string of array, which I can see in the second line and counter value is initialized to zero and sum value is initialized to zero which is of integer type. And if you come to the while loop, where the counter value is initialized to zero and which is smaller than array dot length, so, it has to the length of the array as I can see below is four. So it will be the counter smaller than for the while loop will be executed four times because the array length is four. And zero smaller than four would be the internal value of this while loop. And next I can see a statement with sum sum equal to sum plus or compared with length or function.

Participant

moment I'm printing and so I can see that sum is equal to the first line would be zero plus array of zero dot length. So it's a function.

Participant

So the first the first sum value would be three because sum values initialized to zero and the array length is three, which is jan and then and the result would be three the counter value will be zero plus one, and the counter is incremented. So the again, it has to be a while function. So now the while function is one smaller than four. Again, it'll enter the loop and we'll go sum is equal to next I can see the previous value of Jan was three and now the array counter dot length will calculate the next character next string length Sammy which is four and the total sum would be seven. Now we could again go back to the while loop and counter is incremented. So it will be three smaller than four and it will again come to the sum and now it will be 11 plus three, because 11 was the previous not previous sum value. And the next string is Li which is three characters so it will be 11 plus three equal to 14 So again, we'll go back to the while loop. And now three, sorry, four smaller than four, four is false. And it will, it will skip the while loop and it will go to the next statement, it will go out of the loop. So, now, the average is initialized with sum. Now the value of average is 14, where the sum value is initialized to average and it will return the average value it is 14

Participant

divide, okay as you can see the formula here sum do it should return the sum divided by the counter value, the sum is the sum value is 14 and it is divided by for a counter value. So, it will be it will be 3.5. So, the return average statement will return the value 3.5 the following function which is System dot out

dot print In an average of our a would be 3.5. So, I'm giving my answer here. The next question which is nine oh confident I have finished my algorithm

Observer

Yeah. Thank you for your participation. And thank you for your time. And now, I would like to ask you a couple of questions regarding the snippets. Okay. So, the first question is, **what is the first thing that came to your mind when you saw the algorithms?**

Participant

The first thing I was trying to analyze what the algorithm is going to do, like, what values it is going to take, and what the array is initialized with. So, I'm just trying to have a look on it. And I'm I was trying to see what type of calculation is embedded in it. So, what are the formulas or? Or the Okay, what are the formulas that are

Participant

First, I was focusing on the logic what it is trying to do.

Observer

Okay. **Did the names of the class or names of the functions help you in guessing what the snippet could be?**

Participant

Yeah. it helped me.

Observer

Okay. And , **did you find any similarities between the snippets?**

Participant

Yeah, two were almost similar. I feel

Observer

You noticed that two algorithms are same. So one algorithm average array it performs operations on numbers. And the other one performs same operation on the string array. **So, was you approach in solving these two snippets different?**

Participant

No. First I go through the logic like loop like how control is in the algorithm, then I try to grasp, the logic. I did the same thing with both the programs.

Observer

So you were much focused on the logic and the control flows? Okay, how the control flows?

Participant

Yeah. Yeah.

Episodes	Code
We are calling a public class average, then we are assigning an array of integers.	Read
So the while loop will execute from 0 smaller than 5 means like 5 times it will be start from 0.	Analyse
And the first loop will start with equal to 0 plus 0 plus the array value array of 0. Sum value would be 1 so counter value would be 1 in the first one.	Evaluate
Then it will exit the while loop. And it will print the statement. Oh, I think it will print the answer as 17 . It would print the value 17	Conclude

Coding of sample set of episodes for Numbers algorithm

Episodes	Code
Going ahead with the average number of characters algorithm. I'm just having a look. here in the array of string	Read
And if you come to the while loop, where the counter value is initialized to 0 and which is smaller than array dot length	Analyse
11 plus 3 equal to 14 So again, we'll go back to the while loop. And now 3, sorry, 4 smaller than 4, 4 is false.	Evaluate
So, it will be it will be 3.5. So, the return average statement will return the value 3.5	Conclude

Coding of sample set of episodes for Words algorithm