

Analyzing the Novice's Gaze:

Instructions, Stimuli and Tasks

Instruction given before every recording

This experiment is about program comprehension. There will be three source codes together with different comprehension questions. Please don't guess the answers. The codes do not contain bugs.

In order to go to the next slide, press the LEFT mouse button. There is no possibility to go back.

Lesson 1

Instruction given before the program was presented

Please read and comprehend the following source code. When you are done, press the left mouse button.

Then you will be asked to give a SUMMARY.

Program

cake prices are 1.0 and 2.0

for each item

 if cake price is even

 print "even"

 else

 print "uneven"

Task given after the program was presented

Please give a summary of the program.

Participant's answer:

The program presents two different cakes prices and asks if the prices is even or not. In each case, it is then asked to write if the price is 'even' or not.

Lesson 4

Instruction given before the program was presented

Please read and comprehend the following source code. When you are done, press the left mouse button.

Then you will be asked to give a SUMMARY.

Program

```
import java.util.Scanner ;  
public class CalculateAverage {  
    public static void main ( String [ ] args ) {  
        Scanner in = new Scanner ( System.in ) ;  
        System.out.print ( "First number: " ) ;  
        int num1 = in.nextInt ( ) ;  
        System.out.print ( "Second number: " ) ;  
        int num2 = in.nextInt ( ) ;  
        int average = ( num1 + num2 ) / 2 ;  
        System.out.print ( "Average: " ) ;  
        System.out.print ( average ) ;  
    }  
}
```

Task given after the program was presented

Please give a summary of the program.

Participant's answer:

The program asks for two numbers and calculate an average out of it. It first print "first number" and take the value given into num1 ant then it repeates the same operation with num2.

Finally, it sums the two numbers and divide the result by 2. It then prints : "Average ... (and the value found).

Lesson 6

Instruction given before the program was presented

Please read and comprehend the following source code. When you are done, press the left mouse button.

Then you will be asked to give a SUMMARY.

Program

```
public class PrintPattern {  
    public static void printMethod ( int numberOfRows ) {  
        for ( int row = 1 ; row <= numberOfRows ; row ++ ) {  
            for ( int col = 1 ; col <= row ; col ++ ) {  
                System.out.print ( '*' ) ;  
            }  
            System.out.println ( ) ;  
        }  
    }  
    public static void main ( String [ ] args ) {  
        PrintPattern.printMethod ( 3 ) ;  
    }  
}
```

Task given after the program was presented

Please give a summary of the program.

Participant's answer:

The program Printpattern gives first a method in which, according to a given number of row, the programs draws stars.

Because of the nested loop, the drawing has a pyramidal form.

Then this is applied to a number of row of three ; the results of the program is then :

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