Grundlagen den Programmierung
Revision Quizz

What is the point of using an IDE instead of a simple text editor when writing a program ?

- **a.** syntax coloration is nicer to look at
- **b.** it speeds up the development and ensure the code produced is of quality
- **c.** an IDE ease working within a group of people on a the source code
- **d.** the IDE can compile and check if the code is valid

When trying to resolve a problem or a defect in a program, how should one try to find the root cause ?

- **a.** modify the code to add "print" statement describing the content of the variable
- **b.** look carefully at the code, to ascertain which part of it is not working properly
- **c.** use the debugger
- **d.** reboot your work station, and see if it does fix the problem

What is a **breakpoint** ?

- **a.** the defective part of a program
- **b.** a way to see interactively the content of a variable while a program is running
- **c.** a simple kind of variable
- **d.** a debugger mechanism to run the program up to a certain point

What is the purpose of an 'if' statement ?

- **a.** allow to easily repeat a piece of code
- **b.** assign a new value to a variable
- **c.** a simple form of control flow to direct the program to execute a certain portion of the code
- **d.** a mechanism to test if two variables have the same content

Check the **invalid** statement about it :

```
if ( a == b ) {
 System.out.println("a == b");
} else {
 System.out.println("a != b");
}
```

- **a.** if the content of the variable 'a' and 'b' are the same, "a == b" is printed on the screen
- **b.** if the content of the variable 'a' and 'b' differs, "a != b" is printed on the screen
- **c.** if the content of the variable 'a' and 'b' differs, "a == b" is printed on the screen
- **d.** if the content of the variable 'a' and 'b' are not the same, "a != b" is printed on the screen

What is the purpose of a 'for' statement ?

- **a.** a simple mechanism to assign a new value to a variable
- **b.** iterate over a piece of code a certain number of time
- **c.** test if a variable is 'true'
- **d.** allocate more memory to a variable

Look at the following piece of code and pick the **invalid** statement about it :

```
for ( int i = 0; i < 10; i++ ) {
 System.out.println("current iteration is:" + i);
}
```

a. the statement 'i++' is just an abbreviation for 'i = i + 1'

b. at some point, this program will print "current iteration is :8"

c. the value of the variable 'i' will be, at start, 0

d. at some point, this program will print "current iteration is :10"

What is the purpose of a 'while' statement ?

a. test if an operation returns true

b. allocate more memory to a variable

c. iterate over a piece of code until a certain condition is no longer verified (no longer returns 'true')

d. it's a short cut to write an 'if' statement and 'for' statement

Look at the following piece of code and pick the **invalid** statement about it :

```
int[] array = { 1,5,4,-6,7,9 };
int i = 0;
while ( array[i] > 0 ) {
 System.out.println("Array[:" + i + "] = " + array[i]);
 i++;
}
```

a. this code will print 1,5,4

b. this code will print all the values of the array

c. 'array[i]' will access the value of the array stored at the position equals to the value of 'i'

d. The '-6' will never be printed on the screen

In the following statements regarding functions, check the one which is **invalid** :

a. reuse code easily

b. make code easier to read

c. implements a functionality (feature) of the program

d. hide complexity

Which of the following item is **not** a part of a function :

a. the return type

b. the arguments

c. the function body

d. an if statement