



RESIT EXAM

June 2023 Session

INTRODUCTION TO ALGORITHM

Level : I

Academic year: 2022/2023

Branch : Software Engineering

Duration : 01h

Exercice A : MCQ (12 marks) (Correct answer : 1mark ; Wrong answer : -0.5 mark ; No answer : 0 mark ; mark < 0 = 0)

- Choose a valid name of an identifier amongst the following a) Select ; b) 2n ; c) Type\_var ; d) This variable
- The principle for solving:
  - Describes literally the method for solving the problem ;
  - Presents the solution for solving the problem
  - presents theorems for solving the problem ;
  - Demonstrate theorems for solving the problem
- A constant is : a) A variable ; b) A data whose value remains unchanged ; c) A data type ; d) A static variable
- Consider the following instruction:

<pre>For i = 300 To 200 Step -3 Do   Write(i) Endfor</pre>	We come out of this loop when a) i=198 ;    b) i=200 ;    c) i=0 ;    d) i=201
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- Consider the following instruction:

<pre>For i = 300 To 200 Step -3 Do   Write(i) Endfor</pre>	This loop is executed a) i=100 times ;    b) i=30 times c) i=33 times ;    d) i=34 times
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- Consider the following instruction:

<pre>For i = 300 To 200 Step -3 Do   Write(i) Endfor</pre>	This loop a) Displays the number between 200 and 300 ; b) Displays multiples of 3 between 200 and 300 in descending order ; c) Displays the number between 300 and 200 ; d) Displays the number between 301 and 201
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- Consider the following instruction

<pre>I ← 301 While i &gt;= 300 Do   Write(i) Endwhile</pre>	This loop a) Displays the number greater 300 ; b) Displays the number less than 300 c) Displays the number 300 ; d) Does nothing
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- For a "repeat loop": a) The bloc of instruction is always executed at least once ; b) We leave the loop when the condition becomes FALSE ; c) The execution stops when the number of iterations is reached ; d) The execution stops when the user decides.
- A table: a) Is made up of rows and columns ; b) Has a fixed size at declaration ; c) Has a variable length depending on the needs of the user ; d) Has a variable size at the point of declaration
- Consider the declaration  
**TYPE tab10=table[1..10] of real**  
 Choose the correct instruction: a) For i=1 To 10 Do tab10←0 Endfor ; b) tab10← 0 ; c) tab10[10] ← 0 ; d) None
- Consider the declaration: **Type Mat22=table[2..12] of integer**  
 Choose the correct answer: a) Mat22 is a variable ; b) Mat22 is a type ; c) Mat22 is an object ; d) Mat22 is a table
- TYPE article= Record**

Ref, label: Sequence of character

UP: real

**Endrecord**

**VAR A: article**

Choose the correct instruction:

- a) A←Milk ;    b) Read(A.UP) ;    c) A[i].ref←"L012" ;    d) None