COMP - Instruction Selection (MIEIC - Compilers - 2021)

* This form will record your name, please fill your name.

1. The instruction selection in intermediate representations using trees can be solved by covering the tree with tree tiles representing machine instructions.
   (1 Point)

   - ◯ true
   - ◯ false

2. The use of Dynamic Programming for instruction selection in intermediate representations using trees, always provide the total minimum cost:
   (1 Point)

   - ◯ true
   - ◯ false

3. The use of the Maximal Munch for instruction selection in intermediate representations using trees, always provide the total minimum cost:
   (1 Point)

   - ◯ true
   - ◯ false

4. Considering the two options below, select the one that provides the fastest instruction selection method:
(1 Point)

- ◯ Maximal Munch
- ◯ Dynamic Programming

5. Instruction selection can be avoided by generating a low-level intermediate representation where each element has a direct association to a machine instruction.
(1 Point)

- ◯ true
- ◯ false

6. if we like to minimize the number of instructions resultant from instruction selection, one can use dynamic programming and associate the cost of each tree tile:
(1 Point)

- ◯ 1
- ◯ the number of nodes of the tree tile
- ◯ 2