LAB 7 – week 7 (14.11.2016 – 18.11.2016)

DEADLINE: LAB 10 – week 10 (05.12.2016 – 09.12.2016)
WEIGHT of LAB6: 3% of the final mark

You must work on the JAVA project from Lab6. Please implement the followings:

1. Declare in repository interface a method to serialize the PrgState into a file. Then implement this method in the repository class. Integrate this functionality in your user interface.
2. Declare in repository interface a method to deserialize the PrgState from a file. Then implement this method in the repository class. Integrate this functionality in your user interface.
3. Define and integrate the following boolean expressions:

    exp1 < exp2
    exp1<=exp2
    exp1==exp2
    exp1!=exp2
    exp1> exp2
    exp1>=exp2

Since in our toy language we do not have boolean values, you must use the c-like convention: 0 represents False and any other integer value represents True. For the expression evaluation you must ignore the precedence order of the operators. The order is given by the user when the expression is introduced.
Example: 10 + (2<6) evaluates to 11
    (10+2)<6 evaluates to 0

4. Define and integrate the following While statement:
    while (expression) statement
The statement evaluation rule is as follows:
Stack1={while (exp1) Stmt1 | Stmt2|...}
 SymTable1
Out1
HeapTable1
FileTable1
  ==>
If exp1 is evaluated to 0 then Stack2={Stmt2|...}
Else Stack2={Stmt1 | while (exp1) Stmt1 | Stmt2|...}
SymTable2=SymTable1
Out2=Out1
HeapTable2=HeapTable1
FileTable2=FileTable1
Example: v=6; (while (v-4) print(v);v=v-1);print(v)