Q1

Pc			Fp pile
0	PUSHI	0	0 [ ] 0
2	PUSHI	0	0 [0] 1
4	JUMP	6	0 [0 0] 2
6	PUSHI	7	0 [0 0] 2
8	STOREG	0	0 [0 0 7] 3
10	PUSHI	0	0 [7 0] 2
12	STOREG	1	0 [7 0 0] 3
14	PUSHG	0	0 [7 0] 2
16	PUSHI	1	0 [7 0 7] 3
18	SUP		0 [7 0 7 1] 4
19	JUMPF	37	0 [7 0 1] 3
21	PUSHG	0	0 [7 0] 2
23	PUSHI	2	0 [7 0 7] 3
25	DIV		0 [7 0 7 2] 4
26	STOREG	0	0 [7 0 3] 3
28	PUSHG	1	0 [3 0] 2
30	PUSHI	1	0 [3 0 0] 3
32	ADD		0 [3 0 0 1] 4
33	STOREG	1	0 [3 0 1] 3
35	JUMP	14	0 [3 1] 2
14	PUSHG	0	0 [3 1] 2
16	PUSHI	1	0 [3 1 3] 3
18	SUP		0 [3 1 3 1] 4
19	JUMPF	37	0 [3 1 1] 3
37	PUSHG	1	0 [3 1] 2
39	WRITE		0 [3 1] 2
40	POP		0 [3 1] 2
41	HALT		0 [3] 1

Q2

```
  PUSHI 0
  JUMP 0
LABEL 0
  PUSHI 6
  STOREG 0
LABEL 1
  PUSHG 0
  PUSHI 10
  INF
  JUMPF 2
  PUSHG 0
  PUSHI 1
  ADD
  STOREG 0
  JUMP 1
LABEL 2
  PUSHG 0
  WRITE
  POP
  HALT
```

```
Adr |  Instruction
-----+---------------
  0 | PUSHI 0
  2 | JUMP  4
  4 | PUSHI 6
  6 | STOREG 0
  8 | PUSHG 0
 10 | PUSHI 10
 12 | INF
 13 | JUMPF 24
 15 | PUSHG 0
 17 | PUSHI 1
 19 | ADD
 20 | STOREG 0
 22 | JUMP  8
 24 | PUSHG 0
 26 | WRITE
 27 | POP
 28 | HALT
```

Q3 :
condition
       : expression a=expression ope=('=='|'!='|'>'|'>='|'<'|'<=') b=expression
           {
                   if ($ope.texte == "==") $ope.code= "EQUAL" ;
                   else if ($ope.texte == "<=") $ope.code= "INFEQ";
                   else if ($ope.texte == ">=") $ope.code= "SUPFEQ";
                   else if ($ope.texte == "!=") $ope.code= "NEQ" ;
                   else if ($ope.texte == ">") $ope.code= "SUP";
                   else if ($ope.texte == "<") $ope.code= "INF";

                   $code = $a.code + $b.code + $ope.code + «\n » ;
       | TRUE {$code = « PUSHI 1 » + «\n » }
       | FALSE {$code = « PUSHI 0 » + «\n » } ;
```