

## Kolokvijum iz Arhitekture i organizacije računara 2

a)

Kao u zadatku 1 sa vežbi (sa drugim vrednostima dužina magistrala).

b)

```
; Faza dohvatanja instrukcije
BEGIN:PCout,MARin,Xin
      read, incA, ALUout, PCin
      wmf
      MDROUT, IRin
; Faza dekodovanja instrukcije
OPCASE:opcase
; Faza izvršavanja instrukcije
      JMP:admodJMP
MEMDIR:PCout,MARin,Xin
      read, incA, ALUout, PCin
      wmf
      MDROUT, TEMPLin
      PCout,MARin,Xin
      read, incA, ALUout, PCin
      wmf
      MDROUT, TEMPHin
      bruncnd(JMPEXE)
PCREL: PCout,MARin,Xin
      read, incA, ALUout, PCin
      wmf
      MDROUT, YLin
      PCout,MARin,Xin
      read, incA, ALUout, PCin, Xin
      wmf
      MDROUT, YHin
      ALUadd, ALUout, TEMPIn
      bruncnd(JMPEXE)
REGIND: PCout,MARin,Xin
      read, incA, ALUout, PCin
      wmf
      MDROUT, YLin
      PCout,MARin,Xin
      read, incA, ALUout, PCin
      wmf
      MDROUT, YHin
      REGout, Xin
      ALUadd, ALUout, TEMPIn
      bruncnd(JMPEXE)
MEMIND: PCout,MARin,Xin
      read, incA, ALUout, PCin
      wmf
      MDROUT, YLin
      PCout,MARin,Xin
      read, incA, ALUout, PCin
      wmf
      MDROUT, YHin
      REGout, Xin
      ALUadd, ALUout, MARin, Xin
      read
```

```
    wmfC
    MDRout, TEMPLin
    incA, ALUout, MARin
    read
    wmfC
    MDRout, TEMPHin
JMPEXE:TEMPout, PCin
    branch (IRR, INTH)
    bruncnd (BEGIN)
```

c)        **LOAD R1,  $b[R0]$**   
          **JSR [ $a[R1]$ ]**