



Faculty of Computing

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Subject: Computer Architecture

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Task 1:

START:

INP

ISZ 009

OUT

HLT

file edit modify execute help

DataDec

Registers

Name	Width	Data
AC	16	8
AR	12	1
DR	16	0
E	1	0
I	1	0
IR	16	-8191
PC	12	4
S	1	-1

W1-0.a X Lab11.a X lab11t2.a X Untitled X

1 START:

2 INP

3 ISZ 009

4

5 OUT

6 HLT

7

8

AddrHexDataDec

MAIN

Addr	Data
000	63488
001	40969
002	62464
003	57345
004	0
005	0
006	0
007	0
008	0
009	-3
00A	0
00B	0
00C	0
00D	0
00E	0
00F	0
010	0
011	0

EXECUTING...
Enter Inputs, the first of which must be an Integer: 8
EXECUTION HALTED NORMALLY due to the setting of the bit(s): [HALT-BIT]

Task 2:

START:

INP

ISZ 009

OUT

HLT

Data
Dec

W1-0.a X

Lab11.a X

lab11t2.a X

Untitled X

Addr

Hex

Data

Dec

Registers

Name	Width	Data
AC	16	3
AR	12	-2
DR	16	-2
E	1	0
I	1	0
IR	16	-2
PC	12	4
S	1	0

```

1 START:
2 INP
3 ISZ 009
4
5 OUT
6 HLT
7
8

```

MAIN

Addr	Data
000	63488
001	40969
002	62464
003	65534
004	0
005	0
006	0
007	0
008	0
009	-5
00A	0
00B	0
00C	0
00D	0
00E	0
00F	0
010	0
011	0

EXECUTING...
 Enter Inputs, the first of which must be an Integer: 3
 Output: 3
 EXECUTION HALTED DUE TO AN EXCEPTION: No opcode matched the bits in the register: IR.