

Help

FIRST PROGRAM USING BRANCH INSTRUCTIONS

0:00 / 2:16

1.0x

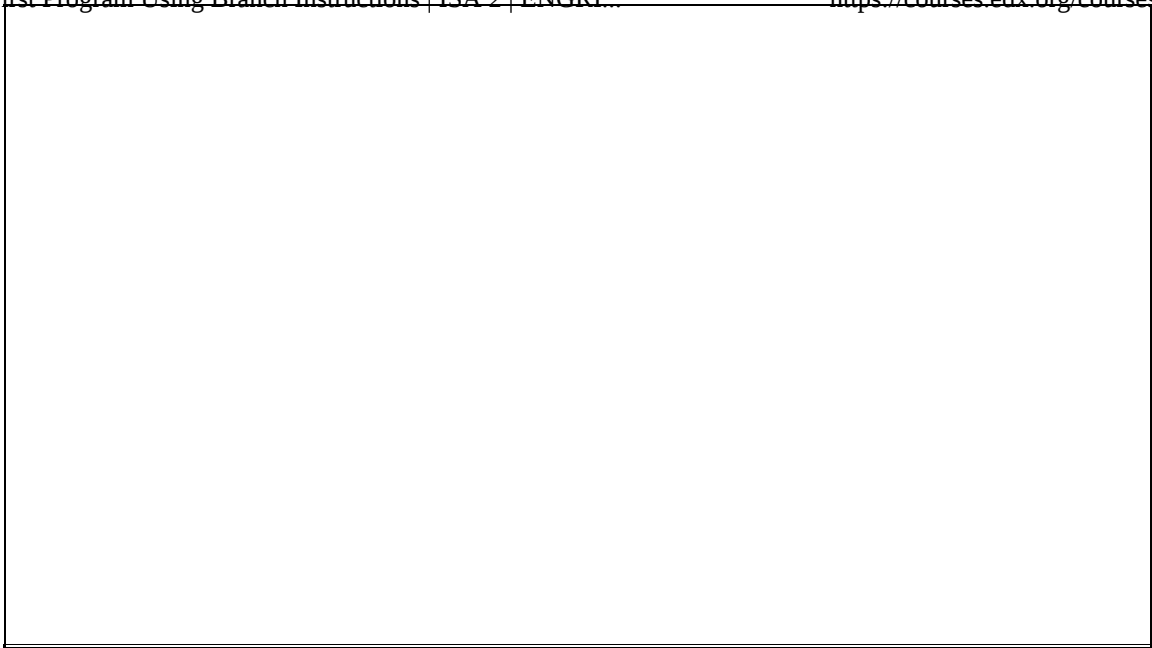
Download transcript

.txt

Show Discussion

New Post

FIRST PROGRAM CODE



3:06 / 3:06

1.0x

Download transcript


.txt

Show Discussion

 New Post

1. CHECK YOUR UNDERSTANDING (1/1 point)

Which of the following is a true statement regarding the BR instructions at x3004 and x3009 of the program?

- ☒ Both are conditional branch instructions. 
- ☐ Both are unconditional branch instructions.
- ☐ The BR at x3004 is an unconditional branch instruction and the BR at x3009 is a conditional branch instruction.
- ☐ The BR at x3004 is a conditional branch instruction and the BR at x3009 is an unconditional branch instruction.

EXPLANATION

Both are conditional branch instructions, even though the BR at x3009 is always taken.

Hide Answer

You have used 2 of 2 submissions

2. CHECK YOUR UNDERSTANDING (1/1 point)

Which of the following is **not** a true statement regarding R1 in the program?

- Help
- ☒

The LEA instruction at x3000 initializes R1 with the first number in the list.

☐

R1 is incremented at x3007 in order to point to the location in memory of the next number in the list.

☐

At the end of the program, the value of R1 is x310C.

☐

The LDR instruction at x3005 loads the contents of the memory address pointed to by R1 into R4.

EXPLANATION

The LEA instruction initializes R1 with the *address* of the first number in the list.

By incrementing R1 at x3007, R1 points to the next number in memory.

When the program ends, R1 will point to the next memory location after the last number in the list, which is location x300C.

LDR instruction adds the offset of 0 to R1, the base register, and loads the value at that address into R4.

Final Check

Save

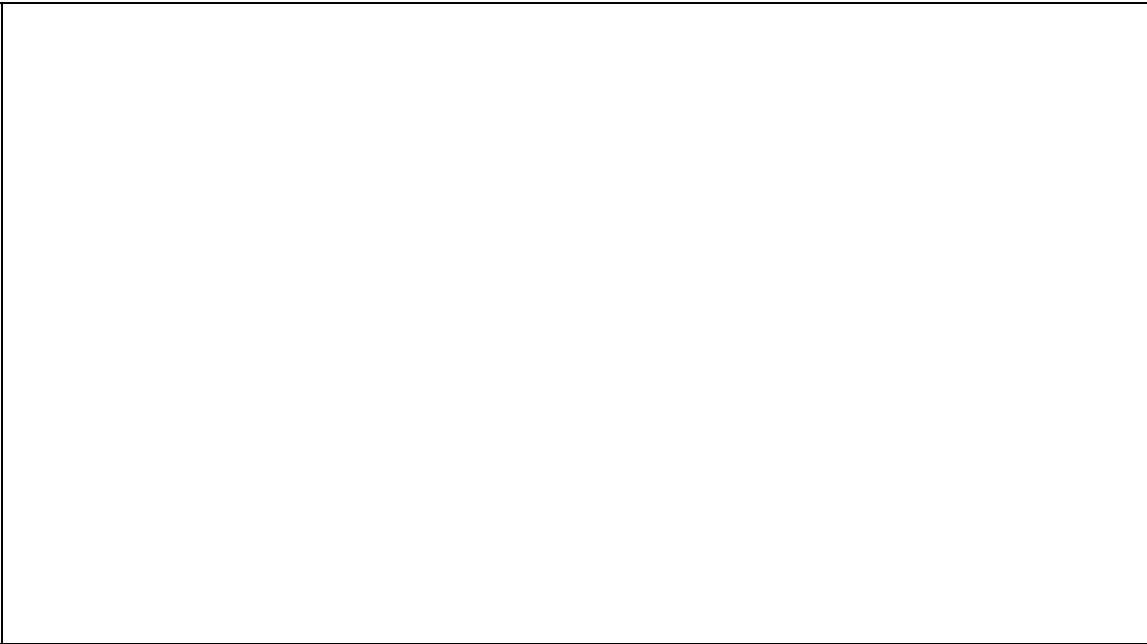
Hide Answer

You have used 1 of 2 submissions

Show Discussion

New Post

JMP AND TRAP



[Download transcript](#) .txt

Help

[Show Discussion](#)[New Post](#)

EdX offers interactive online classes and MOOCs from the world's best universities. Online courses from MITx, HarvardX, BerkeleyX, UTx and many other universities. Topics include biology, business, chemistry, computer science, economics, finance, electronics, engineering, food and nutrition, history, humanities, law, literature, math, medicine, music, philosophy, physics, science, statistics and more. EdX is a non-profit online initiative created by founding partners Harvard and MIT.

© 2015 edX Inc.

EdX, Open edX, and the edX and Open edX logos are registered trademarks or trademarks of edX Inc.

[Terms of Service and Honor Code](#)

[Privacy Policy \(Revised 10/22/2014\)](#)



About edX

[About](#)

[News](#)

[Contact](#)

[FAQ](#)

[edX Blog](#)

[Donate to edX](#)


[Jobs at edX](#)


Follow Us


 [Facebook](#)


 [Twitter](#)


 [LinkedIn](#)

 [Google+](#)

 [Tumblr](#)

 [Meetup](#)

 [Reddit](#)

 [Youtube](#)