Unit 5 - Week 3

Course outline

How does an NPTEL online course work?

Assignment Zero

Week 1

Week 2

Week 3

- Assembly Language Part-III
- ARM Assembly Language Part-I
- Quiz : Assignment 3
- Week 3 Feedback Form

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

Week 10

Week 11

Week 12

Text Transcripts

Download Videos

Assignment 3

The due date for submitting this assignment has passed. **Due on 2020-02-22, 23:59 IST.**
As per our records you have not submitted this assignment.

1) Which of the following instructions translates to "jump unconditionally to label .foo" in the ARM assembly language? *1 point*

- b .foo
- beq .foo
- bne .foo
- Both b) and c)

No, the answer is incorrect.
Score: 0
Accepted Answers:
b .foo

2) Which of the following is a 2-address instruction in Simple Risc? *1 point*

- asr
- nop
- cmp
- st

No, the answer is incorrect.
Score: 0
Accepted Answers:
cmp

3) The semantics - ld reg [reg,reg] denotes - *1 point*

- Register indirect addressing mode
- base - offset addressing mode
- base - index addressing mode
- base - scaled - index addressing mode

No, the answer is incorrect.
Score: 0
Accepted Answers:
base - index addressing mode

4) Immediates in ARM assembly take - *1 point*

- 10 bits with 8-bit payload and 2-bit rot as fields.
- 10 bits with 2-bit payload and 8-bit rot as fields.
- 12 bits with 8-bit payload and 4-bit rot as fields.
- 12 bits with 4-bit payload and 8-bit rot as fields.

No, the answer is incorrect.
Score: 0
Accepted Answers:
12 bits with 8-bit payload and 4-bit rot as fields.

5) Which of the following instructions can be used to set the flags in ARM assembly? *1 point*

- Only compare instructions
- Only regular ALU instructions without suffix "s".
- Only regular ALU instructions with suffix "s".
- Both a) and c).

No, the answer is incorrect.
Score: 0
Accepted Answers:
Both a) and c).

6) The Z flag = 1 in ARM assembly when - *1 point*

- Flag setting instruction results in inequality.
- Flag setting instruction takes the form (left side expression) < (right side expression) only.
- Flag setting instruction takes the form (left side expression) > (right side expression) only.
- Flag setting instruction results in equality.

No, the answer is incorrect.
Score: 0
Accepted Answers:
Flag setting instruction results in equality.

7) Which of the following is an example of a predicated instruction in ARM assembly? *1 point*

- bx
- subpl
- ldr
- str

No, the answer is incorrect.
Score: 0
Accepted Answers:
subpl

8) The flag state (C=0) V (Z=1) in ARM assembly means - *1 point*

- Unsigned lower or equal to
- Unsigned greater or equal to
- Signed lower or equal to
- Signed greater or equal to

No, the answer is incorrect.
Score: 0
Accepted Answers:
Unsigned lower or equal to

9) Which of the following is true about spilling? *1 point*

- It organises and stores the activation blocks.
- It increases the number of registers available from 16 to 20.
- It restores the register values after the function returns.
- None of the above.

No, the answer is incorrect.
Score: 0
Accepted Answers:
It restores the register values after the function returns.

10) The basic instruction format of Simple Risc instructions is - *1 point*

- 32 bits in length including 5 bits for the opcode.
- 30 bits in length including 6 bits for the opcode.
- 30 bits in length including 5 bits for the opcode.
- 32 bits in length including 6 bits for the opcode.

No, the answer is incorrect.
Score: 0
Accepted Answers:
32 bits in length including 5 bits for the opcode.