

# Quiz - Lecture 12

**Due** 4 Sep at 23:59

**Points** 5

**Questions** 5

**Available** 3 Sep at 9:10 - 4 Sep at 23:59 1 day

**Time limit** None

**Allowed attempts** Unlimited

Take the quiz again

## Attempt history

	Attempt	Time	Score
KEPT	<a href="#">Attempt 3</a>	2 minutes	5 out of 5
LATEST	<a href="#">Attempt 3</a>	2 minutes	5 out of 5
	<a href="#">Attempt 2</a>	2 minutes	4 out of 5
	<a href="#">Attempt 1</a>	less than 1 minute	1.67 out of 5

Score for this attempt: **5** out of 5

Submitted 3 Sep at 15:13

This attempt took 2 minutes.

### Question 1

1 / 1 pts

Which of the following operators are not provided by the Hack Virtual Machine?

Correct!

☒ ge

Correct!

☐ sub

☒ le

Correct!

☒ times

☐ lt

Correct!

☒ xor

Correct!

☒ divide

☐ gt

☐ neg

☐ add

## Question 2

1 / 1 pts

Which of the following fragments of Hack assembly language would implement the following virtual machine command? If there is more than one correct answer, select all of them.

push constant 0

Correct!



A=0  
M=M+1  
AD=M-1  
M=0

Correct!



@SP  
A=M  
M=0  
@SP  
M=M+1



@0  
D=A  
@SP  
M=D  
@SP  
M=M+1



@SP  
M=M+1  
A=M  
M=0  
@SP

Correct!

☒ @0  
D=A  
@SP  
A=M  
M=D  
@SP  
AM=M+1

☐ @0  
D=A  
@SP  
M=M+1  
A=M  
M=D  
@SP

### Question 3

1 / 1 pts

Which of the following virtual machine commands would implement the following Jack expression?

```
let b = c - a
```

The variables a, b and c are in the local segment at offsets 2, 7 and 9 respectively.

**Correct!**

push local 9

push local 2

sub

☐ push local 7

push local 9

push local 2

sub

☒ pop local 7

push local 2

push local 3

push local 4

sub

☐ pop

pop local 9

pop local 2

sub

☐ push local 7

push local 2

push local 9

sub

☐ pop local 7

#### Question 4

1 / 1 pts

Which of the following are memory segments in the Hack Virtual Machine?

Correct!

☒ static

☐ variable

Correct!

☒ argument

☐ field

Correct!

☒ constant

#### Question 5

1 / 1 pts

How many memory segments does the Hack Virtual Machine store in the data memory?

☐ 11

☐ 5

☐ 9

☐ 8

☒ 7

☐ 10

☐ 2

Correct!

Quiz score: **5** out of 5