Principles of Programming Languages (CO3005)_NGUYỄN HỨA PHÙNG (CLC_HK232) [CC01,CC03,CC04]

Back

Quiz navigation

1 2 3 4 5 6 7 8

Finish attempt ...

Time left 0:12:30   Hide

Question 1

Not yet answered

Marked out of 1.00

⚑ Flag question

Given the following Java method declaration:

int foo(VD x[],float y,boolean m), where VD is the name of a class.

Write the type of the above function using the rule of JVM?   ([LVD;FZ)I

Answer: ([LVD;FZ)I   ([LVD;FZ)I

Next page

13:11

Time left 0:11:03   Hide

Question 2

Not yet answered

Marked out of 4.00

⚑ Flag question

Given the following method invocation:

x.foo(b*2,a+1), where a and b are in int type, x is an object of VD. What are the elements on the operand stack when executing the instruction **invokevirtual VD/foo(II)I** ?

Top of the stack: result of expression a+1 ⬍ ,   result of expression a + 1

Below the top: result of expression b*2 ⬍ ,   result of b*2

Bottom: address of x ⬍ .   address of x

After the invokevirtual instruction is executed, the number of elements on the operand stack will

decrease by 2 ⬍   decrease by 2

Next page

Select suitable jvm code for the following java code:

new A(2)

will be translated into the following jasmin code:

new A

dup

iconst 2

invovespecial A/init(I)V

new A
dup
iconst 2
invokespecial A/init(I)V

new A
dup
iconst_2
invokespecial A/init(I)V

pop	iconst 2	dup	invovespecial A/init(I)V

invokevirtual A(I)V	new A

Next page

After executing instruction **isub**, the number of elements on the stack is

Select one:

- a. decreased by 1
- b. increased by 1
- c. increased by 2
- d. unchanged
- e. decreased by 2

Clear my choice

Next page

Question 5

Not yet answered

Marked out of 1.00

⚑ Flag question

Select suitable jvm code for the following java code:

new int[2][3]

will be translated into the following jasmin code:

| iconst_2 |
| iconst_3 |
| multianewarray [[I 2 |

iconst_2
iconst_3
multianewarray [[I 2

iconst_2
iconst_3
multianewarray [[I 2

| iconst_2 | iconst_3 | anewarray [I | newarray I |
| invovespecial A/init(II)V | multianewarray [[I 2 | | |

Next page

Question 6

Not yet answered

Marked out of 6.00

⚑ Flag question

Let variable a, b and c have index 2, 3 and 4, respectively, where variable a and c are in int type and variable b is in array type whose element type is int. The following java code:

b[3*c] = a;

will be translated into following jasmin code:

| aload_3 |
| iconst_3 |
| iload_4 |
| imul |
| iload_2 |
| iastore |

aload_3
iconst_3
iload_4
imul
iload_2
iastore

aload_3
iconst_3
iload_4
imul
iload_2
iastore

Next page

Question 7

Not yet answered

Marked out of 1.00

⚑ Flag question

Given the following Java method declaration:

int foo(long x,double y,int z,float t)

What is the index of parameter t in the local variable array?

Answer: 4   6

Next page

Question 8

Not yet answered

Marked out of 4.00

⚑ Flag question

Let variable a and b have index 2 and 3, respectively, where variable a is in int type and variable b is in array type whose element type is int. The following java code:

a = b[3];

will be translated into following jasmin code:

| aload_3 ⬍ |
| iconst_3 ⬍ |
| iaload ⬍ |
| istore_2 ⬍ |

aload_3
iconst_3
iaload
istore_2

aload_3
iconst_3
iaload
istore_2

Finish attempt ...