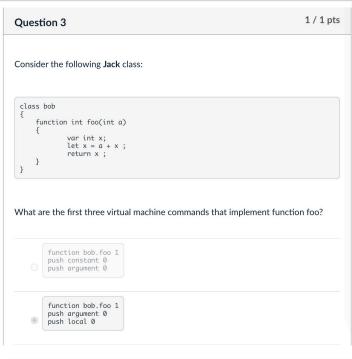


## Arithmetic/Boolean commands:

- · add
- · enb · neg · eq
- ·and
- · or ·not

result this is not a segment ~





```
1 / 1 pts
Question 4
Consider the following Jack function:
                                                                                                      local:
      function int foo()
                                                                                                                      b
                                                                                                                           sum
           var a,b,sum ;
           let b = 10;
while (a < b)
                                                                                                          let sum = sum + a
                let sum = sum + a;
let a = a + 1;
           return sum ;
                                                                                                           push local o
                                                                                                            add
What sequence of virtual machine commands will implement the two let statements
                                                                                                             pop local 2 (sum)
in the body of the while loop?
                                                                                                            et a = a+1
          push sum
          push a
          add
          push a
                                                                                                              push constant 1
          push 1
          add
                                                                                                                       [ocur o (a)
          push local 2
push local 0
          push local 0
push constant 1
            push local 2
push local 0
add
            pop local 2
push local 0
            push constant 1
add
            pop local 0
           push local 3
push local 1
add
pop local 3
push local 1
push constant 1
add
pop local 1
            push local 3
push local 1
add
push local 1
push constant 1
add
            push sum
            push a
add
pop sum
push a
push 1
add
       o pop a
```

2

Question 5 1 / 1 pts

Consider the following Jack class:

What sequence of virtual machine commands is used to initialise the local variable x?

- function bob.foo 1
- push constant 0
  pop x
- push constant 0 pop local 0
- O function foo 1
- The programmer has forgotten to initialise x, no code is generated.