

**loop( $i_0, i_1$ )**

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graph TD; Loop([loop(i0, i1)]) --> Init[p0 = new(BoxedInteger)  
setfield_gc(p0, i0, intval)  
p1 = new(BoxedInteger)  
setfield_gc(p1, i1, intval)]; Init --> Guard1[guard_class(p1, BoxedInteger)  
i2 = getfield_gc(p1, intval)  
guard_class(p0, BoxedInteger)  
i3 = getfield_gc(p0, intval)  
i4 = int_add(i2, i3)  
i9 = int_add(i4, -100)]; Guard1 --> Guard2[guard_class(p0, BoxedInteger)  
i12 = getfield_gc(p0, intval)  
i14 = int_add(i12, -1)]; Guard2 --> Compare[i17 = int_gt(i14, 0)  
guard_true(i17)]; Compare --> Jump[jump(i14, i9)]; Jump -- loop --> Loop;
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$p_0 = \text{new}(\text{BoxedInteger})$   
 $\text{setfield\_gc}(p_0, i_0, \text{intval})$   
 $p_1 = \text{new}(\text{BoxedInteger})$   
 $\text{setfield\_gc}(p_1, i_1, \text{intval})$

$\text{guard\_class}(p_1, \text{BoxedInteger})$   
 $i_2 = \text{getfield\_gc}(p_1, \text{intval})$   
 $\text{guard\_class}(p_0, \text{BoxedInteger})$   
 $i_3 = \text{getfield\_gc}(p_0, \text{intval})$   
 $i_4 = \text{int\_add}(i_2, i_3)$   
 $i_9 = \text{int\_add}(i_4, -100)$

$\text{guard\_class}(p_0, \text{BoxedInteger})$   
 $i_{12} = \text{getfield\_gc}(p_0, \text{intval})$   
 $i_{14} = \text{int\_add}(i_{12}, -1)$

$i_{17} = \text{int\_gt}(i_{14}, 0)$   
 $\text{guard\_true}(i_{17})$

**jump( $i_{14}, i_9$ )**