

X_1

```

{  $a := \phi [0, Entry] [a', Z]$ 
   $i := \phi [0, Entry] [i', Z]$  }
if [not ( $i < N$ )] goto Exit
   $a' := a + 2$ 
   $a_{reg} := a'$ 

```

 Y_1 $c := i + 3$ Z_1

```

 $i' := a_{reg} + c$ 
 $i := i'$ 

```

 X_2

```

{  $a := \phi [0, Entry] [a', Z]$ 
   $i := \phi [0, Entry] [i', Z]$  }
if [not ( $i < N$ )] goto Exit
   $a' := a + 2$ 

```

 Y_2 $c := i + 3$ Z_2 $i' := a' + c$