

Generation of x86-64 Assembly

```
1  CoFixpoint example_block_1 :=
2    Block (Normal 1) [] [
3      r(0) <- i(5);
4      r(1) <- r(0)
5    ] (jump example_block_2).
6
7  with example_block_2 :=
8    Block (Normal 2) [
9      r(2) <- phi [(0, Normal 1); (4, Normal 2)];
10     r(3) <- phi [(1, Normal 1); (5, Normal 2)]
11   ] [
12     r(4) <- r(2) - i(1);
13     r(5) <- r(3) * r(4)
14   ] (if r(4) <= i(1)
15     then example_block_3
16     else example_block_2).
17
18  with example_block_3 :=
19    Block (Normal 3) [] [] (ret r(5)).
```

```
1  L1:
2      mov rcx, 5
3      mov rbx, rcx
4      jmp L2
5  L2:
6      sub rcx, 1
7      imul rbx, rcx
8      cmp rcx, 1
9      jle L2.1
10     jmp L2.2
11  L2.1:
12     jmp L3
13  L3:
14     mov rax, 60
15     mov rdi, rbx
16     syscall
17  L2.2:
18     jmp L2
```