When function f calls function g:

1. If necessary, f pushes EAX, ECX, EDX, and arguments:
   - pushl %ecx
   - pushl arg3
   - pushl arg2
   - pushl arg1
   - pushl %eax

2. f executes call instruction:
   - call g

3. g pushes f’s EBP:
   - pushl %ebp

4. g copies ESP to EBP:
   - movl %esp,%ebp

5. If necessary, g pushes EBX, ESI, EDI and local variables:
   - pushl %ebx
   - pushl localvar1
   - pushl localvar2
   - pushl localvar3

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(6) g uses its arguments (now called parameters) and local variables to compute a return value, and moves that value to EAX:

```
movl 8(%ebp), ???
movl 12(%ebp), ???
-movl -8(%ebp), ???
movl -12(%ebp), ???
movl ???, %eax
```

(7) If necessary, g restores EBX, ESI, EDI

```
movl -4(%ebp),%ebx
```

(8) g copies EBP to ESP:

```
movl %ebp,%esp
```

(9) g pops from stack into EBP:

```
popl %ebp
```

(10) g executes ret instruction:

```
ret
```

(11) f pops arguments from stack, and uses return value in EAX:

```
addl $12, %esp
movl %eax, ???
popl %ecx
```

(12) If necessary, f restores EAX, ECX, EDX