

```
int d = 2;
int foo(int a)
{
    int b = 1;
    int c;
    int f(int x)
    {
        int b = x + b;
        return b;
    }
    int g(int x)
    {
        c = f(x - b);
        return c + a;
    }
    c = c + g(d - b);
    return c;
}
```

The diagram illustrates the control flow of the provided C code. Colored arrows trace the execution paths between different parts of the code:

- Black arrows:** Trace the main execution flow, including the entry to the `foo` function and the return path.
- Green arrows:** Highlight the call to `foo` from the main function and the return path back to the caller.
- Red arrows:** Highlight the call to the nested function `f` and the return path.
- Blue arrows:** Highlight the call to the nested function `g` and the return path.