```
int group1 = 101;
int group2 = 106;

void call_swap() {
    swap(&group1, &group2);
}


void swap(int *xp, int *yp) {
    int t0 = *xp;
    int t1 = *yp;
    *xp = t1;
    *yp = t0;
}
```

```
call_swap:
        • • •
        sub    esp, 8
        mov    dword [esp + 4], group2
        mov    dword [esp], group1
        call   swap
        • • •

swap:
        push   ebp
        mov    ebp, esp
        push   ebx

        mov    edx, dword [ebp + 8]
        mov    ebx, dword [edx]
        mov    ecx, dword [ebp + 12]
        mov    eax, dword [ecx]
        mov    dword [edx], eax
        mov    dword [ecx], ebx

        pop    ebx
        pop    ebp
        ret
```

```
int pcount_r(unsigned x) {
    if (x == 0)
        return 0;
    else return
        (x & 1) + pcount_r(x >> 1);
}
```

```
pcount_r:
        push        ebp
        mov         ebp, esp
        push        ebx
        sub         esp, 4
        mov         ebx, dword [ebp + 8]
        mov         eax, 0
        test        ebx, ebx
        je    .L3
        mov         eax, ebx
        shr         eax, 1
        mov         dword [esp], eax
        call        pcount_r
        mov         edx, ebx
        and         edx, 1
        lea         eax, [edx + eax]
.L3:
        add         esp, 4
        pop         ebx
        pop         ebp
        ret
```