

```
push    %ebp
mov     %esp,%ebp
and     $0xffffffff0,%esp
sub     $0x20,%esp
mov     0xc(%ebp),%eax
add     $0x4,%eax
mov     (%eax),%eax
mov     %eax,(%esp)
call    80483b0 <atoi@plt>
mov     %eax,0x1c(%esp)
mov     0xc(%ebp),%eax
```



```
#include <stdint.h>
#include <stdio.h>
#include <stdlib.h>
```

```
int32_t foo(int32_t a, int32_t b);
```

```
// From module:    layout.c
// Address range: 0x80484ac - 0x80484cd
// Line range:     5 - 10
int32_t foo(int32_t a, int32_t b) {
    int32_t c = 14 * (b + a); // 0x80484c4
    return c;
}
```

```
// From module:    layout.c
// Address range: 0x80484cf - 0x8048559
// Line range:     13 - 30
int main(int argc, char **argv) {
    int32_t apple = (int32_t)argv; // 0x80484d8
    int32_t str_as_i = atoi((int8_t *)*(int32_t *) (apple + 4));
    int32_t str_as_i2 = atoi((int8_t *)*(int32_t *) (apple + 8));
    int32_t banana = foo(str_as_i, str_as_i2); // 0x804850f
    gets(NULL);
    puts(NULL);
    printf("foo(%d, %d) = %d\n", str_as_i, str_as_i2, banana);
    return 0;
}
```