

### Problem 21. (8 points):

Consider the following assembly representation of a function `foo` containing a `for` loop:

```
foo:
    pushl %ebp
    movl %esp,%ebp
    pushl %ebx
    movl 8(%ebp),%ebx
    leal 2(%ebx),%edx
    xorl %ecx,%ecx
    cmpl %ebx,%ecx
    jge .L4
.L6:
    leal 5(%ecx,%edx),%edx
    leal 3(%ecx),%eax
    imull %eax,%edx
    incl %ecx
    cmpl %ebx,%ecx
    jl .L6
.L4:
    movl %edx,%eax
    popl %ebx
    movl %ebp,%esp
    popl %ebp
    ret
```

Fill in the blanks to provide the functionality of the loop:

```
int foo(int a)
{
    int i;
    int result = _____;

    for( _____; _____; i++ ) {
        _____;
        _____;
    }
    return result;
}
```