

## Lecture 16 Worksheet

```
void calculate(long x, long y, long *ptr) {  
    _____;  
}
```

-----

```
calculate:  
    leaq (%rdi,%rsi,2), %rax  
    movq %rax, (%rdx)  
    ret
```

Use the space below to sketch out the values of registers to determine how to fill in the blank to translate the assembly back to C code. Assume `x` is in `%rdi`, `y` is in `%rsi`, and `ptr` is in `%rdx`. Sketch out any additional registers needed.

x

`%rdi`

y

`%rsi`

ptr

`%rdx`