More work needed to calculate `base + limit` vs checking just the base.

Thus, we check if a given address is $\geq$ the base and THEN we check if it is $\leq$ the limit.

Base checked first, then base + limit violation

$$q : 3 ops \qquad 19/3 \text{ avg}$$
$$r : 3 + 5 = 8 ops$$
$$s : 3 + 5 = 8 ops$$

Base + limit checked first, then base violation

$$q : 5 ops \qquad 21/3 \text{ avg}$$
$$r : 5 + 3 = 8 ops$$
$$s : 5 + 3 = 8 ops$$

When in memory should a process be placed?

```
for (int x = 0; x < 10; x++) {
  string s = input() // prompt user
}
```

The OS knows the size of an int, but it doesn't know the size of the input.

> IF you know the size of the datum, and where in memory it might reside at compile time, then reserve the memory at compile time.

What is the downside of this approach?

- Overflow
- Not running
- Coordination