

Stop When We Can Write as C Functions

We can check for primality
with a C function!

But we need a function signature...

```
int32_t is_prime (int32_t num);
// Returns 1 if num is prime,
// or 0 if num is not prime.
```

Now we're ready to write main.

Our main Function for Printing Primes < 1000

```
int main ()
{
    int32_t check;
    for (check = 2; 1000 > check;
        check++) {
        if (is_prime (check)) {
            printf ("%d is prime.\n",
                check);
        }
    }
    return 0; // success, by convention
}
```

Remind Me: What Does Prime Mean Again?

Let's write `is_prime`.

When is a number N prime?

N is prime iff

- only 1 and N
- divide the number evenly.
- (N is not a multiple of anything but 1 and N .)

Let's Decompose the Problem

Let's use another `for` loop.

