Need to Make Up Variables for Our Assumptions

```
01F8:                                   E002 F022 F025 000A
0204: 0057 0065 006C 0063 006F 006D 0065 0020 0074 006F 0020 0074
0210: 0068 0065 0020 004C 0043 002D 0033 0020 0073 0069 006D 0075
021C: 006C 0061 0074 006F 0072
```

1. What is true at the start of "test" in each iteration?
   - **a. `start` holds first address for line.**
   - **b. `start` is a multiple of 12.**

We have to make these invariants hold true!

Only Print Requested Addresses

```
01F8:                                   E002 F022 F025 000A
0204: 0057 0065 006C 0063 006F 006D 0065 0020 0074 006F 0020 0074
0210: 0068 0065 0020 004C 0043 002D 0033 0020 0073 0069 006D 0075
021C: 006C 0061 0074 006F 0072
```

2. When does the iteration stop (what is "test")?

   Stop when **`start >= addr_e`**.

Recall that we do not print the contents of **`addr_e`**.

Nothing to Do After the Iteration Finishes

```
01F8:                                   E002 F022 F025 000A
0204: 0057 0065 006C 0063 006F 006D 0065 0020 0074 006F 0020 0074
0210: 0068 0065 0020 004C 0043 002D 0033 0020 0073 0069 006D 0075
021C: 006C 0061 0074 006F 0072
```

3. What should be done when iteration stops?

   Nothing.

When the iteration finishes, the function is done.

`start` Should be the Largest Multiple of 12 `<= addr_s`

```
01F8:                                   E002 F022 F025 000A
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```

4. How do you set up for the loop (what is "init")?

```
start = (addr_s / 12) * 12
```

We need **`start`** to be **`<= addr_s`**, and a multiple of 12.

