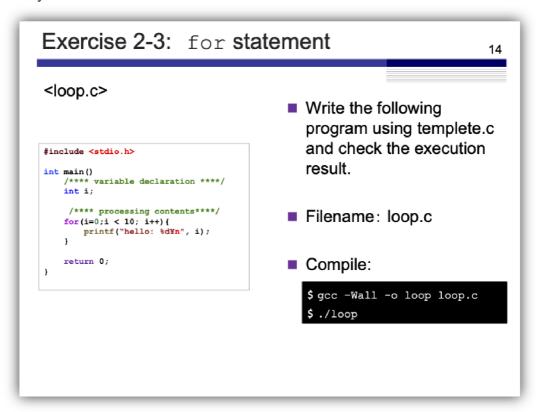
Exercise 2-3: for statement

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This exercise introduces the for loop. A for loop iterates through a section of code for a certain amount of times, or until a condition is achieved. Taking a look at loop.c:

```
#include <stdio.h>

int main()
{
    /**** variable declaration ****/
    int i;

    /**** processing contents ****/
    for(i=0;i<10;i++) {
        printf("hello: %d\n", i);
    }

    return 0;
}</pre>
```

This for loop initiates at i=0 and loops as long as i<10, adding 1 to i every time an iteration is completed (this is what i++ does). Logically, we can assume that this loop will print 10 times, which

is when i is equal to 0, 1, 2, 3, 4, 5, 6, 7, 8, and finally 9. At the last iteration (when i = 9), the for loop adds 1 to i, which makes it equal 10, and therefore the statement i < 10 is not true anymore. This will end the for loop and continue with the program. Since we don't have anything after the for loop, it will just end.

Running the program after compiling it confirms our assumption: