Outline

- for loop
- Nested loop
- Review Quiz02 and Leap year example
- Nested loop exercises
for loop

- This program prints integers from 1 to 25.

```cpp
int main() {
    for(int i = 1; i <= 25; i++) {
        cout << i << " ";
    }
    return 0;
}
```
for loop

- This program prints odd numbers between 1 and 25.

```cpp
int main() {
    for(int i = 1; i <= 25; i += 2) {
        cout << i << " ";
    }
    return 0;
}
```
Nested loop

```cpp
int main() {
    for(int i = 1; i <= 5; i++) {
        for(int j = 1; j <= 5; j++) {
            cout << "*";
        }
        cout << endl;
    }
    cout << endl;
    return 0;
}
```

[dzhang@venus CS111]$ ./a.out
*****
*****
*****
*****
*****
Review

- Quiz02
- Leap year example
Leap year example

• Identify a leap year:

```java
if(year % 400 == 0) {
    isLeapYear = true;
} else if(year % 4 == 0 && year % 100 != 0) {
    isLeapYear = true;
} else {
    isLeapYear = false;
}
```

should be "=" instead of "=="
Exercise 1

- Create a program that prints the following.

*  
** 
*** 
**** 
***** 
******
Exercise 2

- Create a program that prints the following.

```
*****
****
***
**
*  
```
Exercise 3

- Create a program that prints the following.

```
*****
****
***
**
*
```