# Nested `if` Statements

- `if-else` statement can contain simple or compound statements
  - Another `if-else` statement can be included
- Example:

```
if (hours < 9)
{
    if (distance > 500)
        cout << "snap";
}
else
    cout << "pop";
```

# The `if-else` Chain

- Format:

```
if (expression_1)
        statement1;
else if (expression_2)
        statement2;
else
        statement3;
```

- Chain can be extended indefinitely by making last statement another `if-else` statement

## Program 4.4

```cpp
#include <iostream>
using namespace std;

int main()
{
  char marcode;

  cout << "Enter a marital code: ";
  cin  >> marcode;

  if (marcode == 'M')
    cout << "Individual is married." << endl;
  else if (marcode == 'S')
    cout << "Individual is single." << endl;
  else if (marcode == 'D')
    cout << "Individual is divorced." << endl;
  else if (marcode == 'W')
    cout << "Individual is widowed." << endl;
  else
    cout << "An invalid code was entered." << endl;

  return 0;
}
```