Making Decisions

There are two kinds of control statements: selection (decision) and **iteration** (loops). Selection is also called **branching**, because any time you run the program you may take a different path through the code. C++ has the same five branching or selection statements that you met in Java.

Let's start with the `if` statement which is the simplest conditional statement in C++.

```
if (condition) { statements }
if (condition) { statements } else { statements }
```

Use the first form when you want to carry out an action when *condition* is **true**, but do nothing when it is **false**. This is known as a "**guarded action**" pattern.

Use the second form choose between **two mutually-exclusive** actions. This is the **either-or** version of the `if` statement; the "**alternative action**" idiom or pattern.

Here's an alternative-action example which tells if an integer `n` is even or odd.

```
cout << "The number " << n << " is ";
if (nt % 2 == 0)
{
    cout << "even." << endl;
}
else
{
    cout << "odd." << endl;
}
```

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