3.4: ALTERNATIVE EXECUTION
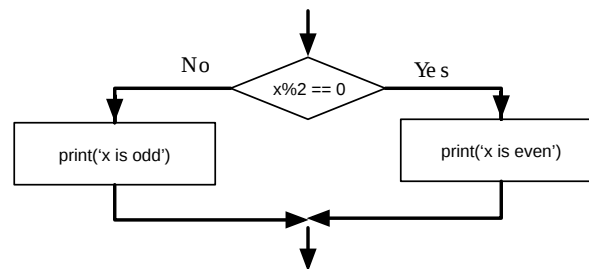
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A second form of the `if` statement is *alternative execution*, in which there are two possibilities and the condition determines which one gets executed. The syntax looks like this:

```
if x%2 == 0 :
    print('x is even')
else :
    print('x is odd')
```

If the remainder when `x` is divided by 2 is 0, then we know that `x` is even, and the program displays a message to that effect. If the condition is false, the second set of statements is executed.

If-Then-Else Logic

Since the condition must either be true or false, exactly one of the alternatives will be executed. The alternatives are called *branches*, because they are branches in the flow of execution.