**Conditional statements are an essential part of programming in Python. They allow you to make decisions based on the values of variables or the result of comparisons.**

**In this article, we'll explore how to use if, else, and elif statements in Python, along with some examples of how to use them in practice.**

**How to Use the if Statement in Python**

**The if statement allows you to execute a block of code if a certain condition is true. Here's the basic syntax:**

**if condition:**

**# code to execute if condition is true**

**The condition can be any expression that evaluates to a Boolean value (True or False). If the condition is True, the code block indented below the if statement will be executed. If the condition is False, the code block will be skipped.**

**Here's an example of how to use an if statement to check if a number is positive:**

**num = 5**

**if num > 0:**

**print("The number is positive.")**

## How to Use the else Statement in Python

**The else statement allows you to execute a different block of code if the if condition is False. Here's the basic syntax:**

**If the condition is True, the code block indented below the if statement will be executed, and the code block indented below the else statement will be skipped.**

**If the condition is False, the code block indented below the else statement will be executed, and the code block indented below the if statement will be skipped.**

**Here's an example of how to use an if-else statement to check if a number is positive or negative:**

**num = -5**

**if num > 0:**

**print("The number is positive.")**

**else:**

**print("The number is negative.")**

## How to Use the elif Statement in Python

**The elif statement allows you to check multiple conditions in sequence, and execute different code blocks depending on which condition is true. Here's the basic syntax:**

**if condition1:**

**# code to execute if condition1 is true**

**elif condition2:**

**# code to execute if condition1 is false and condition2 is true**

**elif condition3:**

**# code to execute if condition1 and condition2 are false, and condition3 is true**

**else:**

**# code to execute if all conditions are false**

### **Assigning a letter grade based on a numerical score**

**score = 85**

**if score >= 90:**

**grade = "A"**

**elif score >= 80:**

**grade = "B"**

**elif score >= 70:**

**grade = "C"**

**elif score >= 60:**

**grade = "D"**

**else:**

**grade = "F"**

**print("Your grade is:", grade)**

**year = 2000**

**if year % 4 == 0:**

**if year % 100 == 0:**

**if year % 400 == 0:**

**print(year, "is a leap year.")**

**else:**

**print(year, "is not a leap year.")**

**else:**

**print(year, "is a leap year.")**

**else:**

**print(year, "is not a leap year.")**