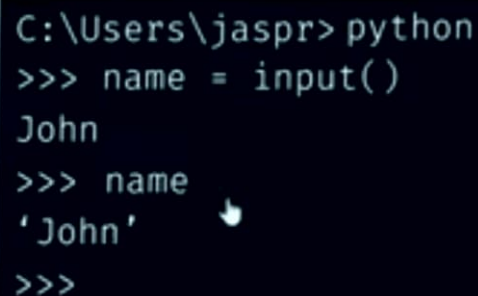


input() Method

- Used to take **input** from the **user**.
- User input is always converted to a **string**.

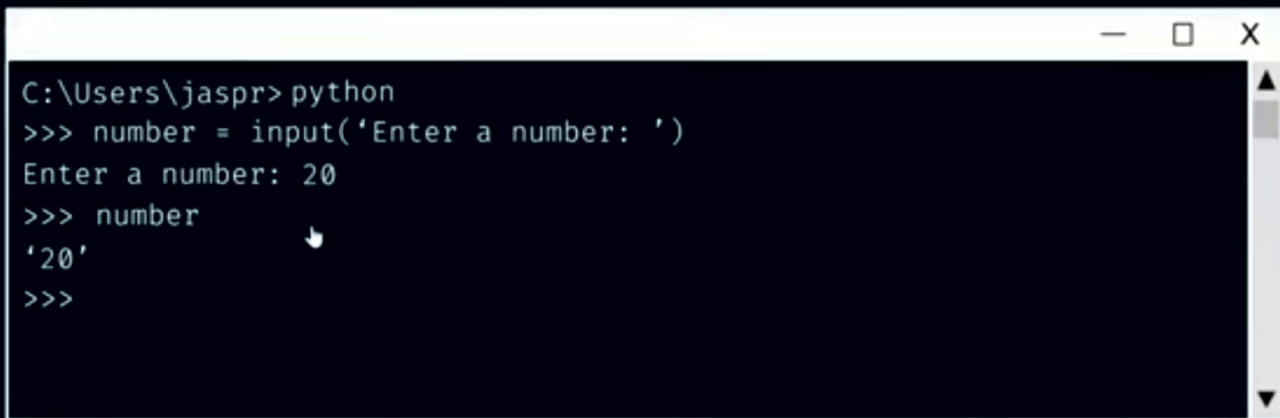


```
C:\Users\jaspr> python
>>> name = input()
John
>>> name
'John'
>>>
```

The screenshot shows a Windows command prompt window with a white title bar and standard minimize, maximize, and close buttons. The command prompt displays the execution of a Python script. The user runs 'python' at the C:\Users\jaspr directory. The Python prompt '>>>' shows the assignment 'name = input()'. The user then enters 'John' at the prompt. The next Python prompt '>>>' shows the variable 'name' being printed, resulting in the string 'John' enclosed in single quotes. A mouse cursor is visible over the 'John' output. The final prompt '>>>' is shown without further input.

input() Method with a Message

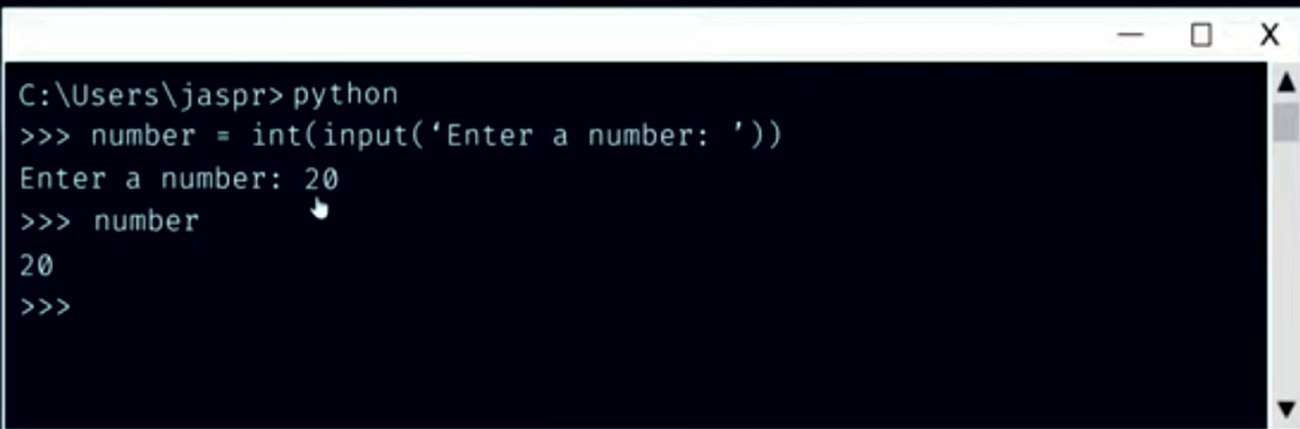
- o *Syntax:* input('Message')

A screenshot of a Windows command prompt window. The title bar at the top shows standard window controls (minimize, maximize, close) and the path 'C:\Users\jaspr>'. The command prompt displays a Python session. The user has entered 'python' at the prompt, and the shell has responded with '>>>'. The user then enters 'number = input('Enter a number: ')', and the shell responds with 'Enter a number: 20'. The user then enters 'number', and the shell responds with ''20''. Finally, the user enters '>>>', and the shell responds with '>>>'.

```
C:\Users\jaspr> python
>>> number = input('Enter a number: ')
Enter a number: 20
>>> number
'20'
>>>
```

Typecasting the User Input

- **Typecasting** is needed to convert a string to an integer.
- `input()` method can be provided as an argument to the `int()` method.

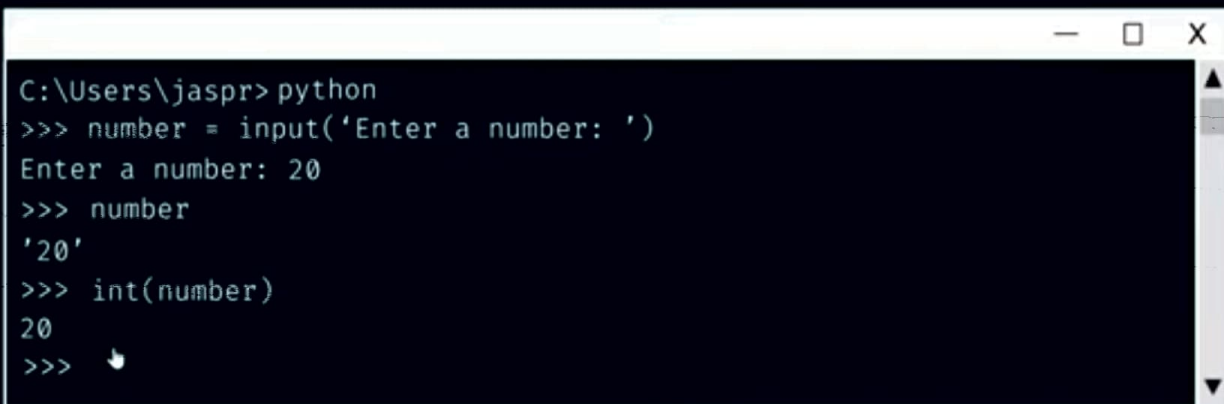
A screenshot of a Windows command prompt window. The title bar shows standard Windows window controls (minimize, maximize, close). The command prompt shows the following text:

```
C:\Users\jaspr> python
>>> number = int(input('Enter a number: '))
Enter a number: 20
>>> number
20
>>>
```

A mouse cursor is visible pointing at the number '20' on the line following the prompt 'Enter a number: 20'.

Typecasting the User Input

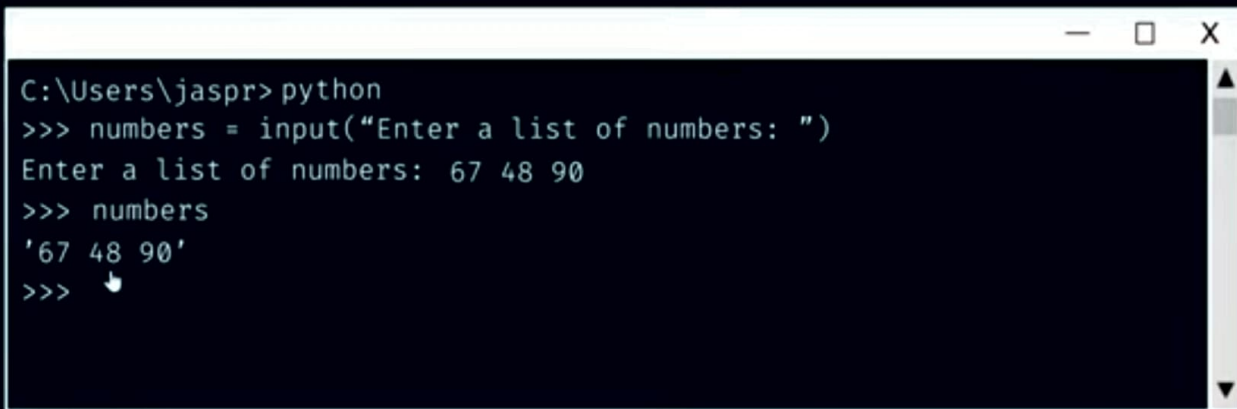
- **Typecasting** is needed to convert a string to an integer.
- Alternatively, number can be provided as an argument to the `int()` method.



```
C:\Users\jaspr> python
>>> number = input('Enter a number: ')
Enter a number: 20
>>> number
'20'
>>> int(number)
20
>>>
```

Problem with the input() Method

- Returns **input** from the user as a **string**.



```
C:\Users\jaspr> python
>>> numbers = input("Enter a list of numbers: ")
Enter a list of numbers: 67 48 90
>>> numbers
'67 48 90'
>>>
```

Problem with the input() Method

Expectation

| numbers | | |
|---------|----|----|
| 67 | 48 | 90 |
| 0 | 1 | 2 |

Reality

| numbers | | | | | | | |
|---------|-----|---|-----|-----|---|-----|-----|
| '6' | '7' | | '4' | '8' | | '9' | '0' |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Input a List using Loops

```
C:\Users\jaspr> python
>>> n = int(input("Enter the number of elements: "))
Enter the number of elements: 3
>>> numbers = []
>>> for i in range(n):
...     x = int(input())
...     numbers.append(x)
...
67
48
90
>>> numbers
[67, 48, 90]
>>>
```