

Python's input () function.

What are Input Functions in Python?

Python Input functions are built-in functions in Python that allows the programmer to accept the user's input during the execution of the code. The input function in Python stops the execution of the program and waits for the user to provide the input, which is then assigned to a variable in the program to get the final output.

Syntax

```
input([prompt])
```

- Prompt is optional, and if it is given, it is written to standard output without a trailing new line. The function then reads a line from the input, converts it to a string, and returns it.
- Input function takes the prompt as an argument, displays the prompt to the users, and waits for the user to provide the input. Once the user inputs the text and presses the enter key, the function returns the string.

```
# Take Input as a String
```

```
name = input("Enter The Name of Employee: ")
```

```
# Take Input as an Integer
```

```
code = int(input("Enter the Employee Code: "))
```

```
# Take Input as a Float
```

```
ctc = float(input("Enter the CTC of the Employee: "))
```

```
#print all the details:
```

```
print("\n")
```

```
print("Employee Details")
```

```
print("name", "code", "ctc")
```

```
print(name, code, ctc)
```

How to Input Multiple Values in a Single Line

```
#multiple input value in a single line
```

```
name, code, ctc = input('Enter the Employee Name, Employee Code, and CTC  
separated by a space : ').split()
```

```
print("name", name)
```

```
print("code", code)
```

```
print("ctc", ctc)
```

```
# taking three inputs at a time
```

```
x, y, z = input("Enter three values: ").split()
```

```
print("Total number of students: ", x)
```

```
print("Number of boys is : ", y)
```

```
print("Number of girls is : ", z)
```

```
#When we need to take inputs containing Separator and Maxsplit
```

```
s,t,u = input("Please enter two values for variables ").split(", ",3)
```

```
# assigning values in a single line for three variables s, t, and u and implementing a split method to obtain individual values
print("The value for variables are :", s,t,u)
```

When we need to take Unlimited Inputs

```
k = input("Please enter two values for variables ").split(",")
# assigning values in a single line for three variables a, b and c and implementing a split method to obtain individual values
print("The value for variables are :", k)
```

Python eval()

Programmers can use the Python eval() function to dynamically evaluate expressions passed as a string argument to the built-in function. When a string is passed to Python eval(), it is parsed, compiled to bytecode, and then evaluated as a Python expression.

```
age = eval(input("Enter your age "))
```

Python's eval function interprets the character string and determines its type automatically. So if you enter the number 25, the eval function converts it to an integer, assigns it to the variable age and gives age the type int. Then you can do arithmetic with it without further conversion.

- Evaluating expression

```
evalExample = eval(input("Enter a numerical operation of your choice: "))
print(evalExample)
print(type(evalExample))
```