

The Input Function

The input function

Built-in function, instructs Python to pause and read data from user

Data always passed to program with **String** data type, including numbers (3 will become "3")

When calling functions, function name always followed by argument list inside parentheses

The input function

Syntax for calling the input function:

variable = input(prompt)



argument list

The input function

variable = input(prompt)

Example:

```
name = input("What is your name?")
```

This code will prompt a user to enter their name, then store that name in a variable called name



input.py

```
1 name = input("What is your name? ")
2 print("Hello " + name + "!")
3 print(type(name))
4
```

TERMINAL

OUTPUT

PROBLEMS

DEBUG CONSOLE

1: python



```
minae@PSYCHE MINGW64 ~/Desktop/NucampFolder/Python/1-Fundamentals
$ python input.py
What is your name? Nucamp Student
Hello Nucamp Student!
<class 'str'>
```



input.py

```
1 name = input("What is your name? ")
2 print("Hello " + name + "!")
3 print(type(name))
4
```

TERMINAL OUTPUT PROBLEMS DEBUG CONSOLE

1: python



```
What is your name? Nucamp Student
Hello Nucamp Student!
<class 'str'>
```

```
minae@PSYCHE MINGW64 ~/Desktop/NucampFolder/Python/1-Fundamentals
$ python input.py
What is your name? 23
Hello 23!
<class 'str'>
```

```
minae@PSYCHE MINGW64 ~/Desktop/NucampFolder/Python/1-Fundamentals
$
```



Using input to break out of an infinite loop

input_while.py X

```
1 while True:
2     print("1. Number One")
3     print("2. Number Two")
4     print("3. Break out of infinite loop")
5     option = input("Pick an option: ")
6     if option == "1":
7         print("You chose 1")
8     elif option == "2":
9         print("You chose 2")
10    elif option == "3":
11        print("Leaving the loop!")
12        break
13    else:
14        print("Invalid command")
15 print("You have left the loop.")
16
```




input_while.py ✕

```
1 while True:
2     print("1. Number One")
3     print("2. Number Two")
4     print("3. Break out of infinite loop")
5     option = input("Pick an option: ")
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input_while.py ×

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```

TERMINAL

OUTPUT

PROBLEMS

DEBUG CONSOLE

1: python



minae@PSYCHE MINGW64 ~/Desktop/NucampFolder/Python/1-Fundamentals

\$ python input_while.py

1. Number One

2. Number Two

3. Break out of infinite loop

Pick an option: 1

You chose 1

1. Number One

2. Number Two

3. Break out of infinite loop

Pick an option: █



input_while.py ×

```
1 while True:
2     print("1. Number One")
3     print("2. Number Two")
4     print("3. Break out of infinite loop")
5     option = input("Pick an option: ")
6     if option == "1":
7         print("You chose 1")
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10    elif option == "3":
11        print("Leaving the loop!")
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```

TERMINAL OUTPUT PROBLEMS DEBUG CONSOLE

1: python



```
3. Break out of infinite loop
Pick an option: 1
You chose 1
1. Number One
2. Number Two
3. Break out of infinite loop
Pick an option: 2
You chose 2
1. Number One
2. Number Two
3. Break out of infinite loop
Pick an option: 
```



input_while.py ×

```
1 while True:
2     print("1. Number One")
3     print("2. Number Two")
4     print("3. Break out of infinite loop")
5     option = input("Pick an option: ")
6     if option == "1":
7         print("You chose 1")
8     elif option == "2":
9         print("You chose 2")
10    elif option == "3":
11        print("Leaving the loop!")
12        break
```

TERMINAL OUTPUT PROBLEMS DEBUG CONSOLE

1: python



```
3. Break out of infinite loop
Pick an option: 2
You chose 2
1. Number One
2. Number Two
3. Break out of infinite loop
Pick an option: abc
Invalid command
1. Number One
2. Number Two
3. Break out of infinite loop
Pick an option: 
```



input_while.py ×

```
1 while True:
2     print("1. Number One")
3     print("2. Number Two")
4     print("3. Break out of infinite loop")
5     option = input("Pick an option: ")
6     if option == "1":
7         print("You chose 1")
8     elif option == "2":
9         print("You chose 2")
10    elif option == "3":
11        print("Leaving the loop!")
12        break
```

TERMINAL OUTPUT PROBLEMS DEBUG CONSOLE

1: bash



```
3. Break out of infinite loop
Pick an option: abc
Invalid command
1. Number One
2. Number Two
3. Break out of infinite loop
Pick an option: 3
Leaving the loop!
You have left the loop.
```

minae@PSYCHE MINGW64 ~/Desktop/NucampFolder/Python/1-Fundamentals

\$