

Input Function in Python

input() function is used to *take user input*.

- *By default*, it returns the *user input* in form of a *string*.

input() function syntax :

```
input(prompt)

a = input("Enter your 1st subject Marks: ")

b = input("Enter your 2nd subject Marks: ")

print("Total marks obtained = ", a + b)
```

Did you Think ?

Question # 1:

Why + symbol is used in print function for print users input ?

```
a = input("Your Name: ")

b = input("Your Age: ")

print(a + b)
```

Answer:

- This " + " symbol shows the **concatenation** in the output.
- In C++, we use " , " **symbol** to print two variable in print function.

Concatenation:

- **Concatenation** means to **join two or more strings**.
- " + " **symbol** is used to join two or more strings because input function returns the *user input* in form of a *string*.
- **Output print the input in one line.**

```
a = input("Your Name: ") # Noor
b = input("Your Age: ") # 34
print(a + b)

# Output
Noor34
```

If you want to **print in a new line** then we can use "`\n`"

```
print(a + " \n " + b)

# Output
Noor
34
```

Question # 2:

How does the input() function handle different data types? ?

Answer:

By using **typecasting** we can convert any data type to another data type.

- The **input()** function always returns the user **input as a string**, regardless of what the user types.
- However, If you need a **different data type (like an integer or float)**, you have to **convert it manually by using typecasting**.

```
a = input("1st number: ") # a = 4
b = input("2nd number: ") # b = 6
print(a + b)

# Output
46 # ab

# (here, a and b is a string and add two strings means that both strings print in one line )
```



Why answer is 46 ?



Answer: The result is **46 because** input function always print **input in form of string** and " + " symbol is used to join two or more strings.

Typecasting:

- Input is a **string** and convert it into **integer or float**.
- Type "**int**" before the input function.

```
a = int input("1st number: ") # a = 4
b = int input("2nd number: ") # b = 6

print(a + b)

# Output

10 # a + b

# (here, a and b is a integer and add two integers means sum of two integers )
```



Key points:

- Prompt is a **string** that will be displayed in the **Terminal**.
- By default, it returns the **user input** in form of a **string**.
- If any* user wants to **take input as int or float**, we just need to **typecast it**.

```
a = input("Enter your 1st subject Marks: ")
b = input("Enter your 2nd subject Marks: ")
print("Total marks obtained = ", a + b)

# typecasting
int(input(prompt))
float(input(prompt))
```