

CHAPTER-2
PYTHON FUNDAMENTALS
SUB TOPIC –INPUT OUTPUT IN PYTHON – PART 3

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SAMPLE INPUT AND OUTPUT

Python allows to get input interactively using built-in function **input()**. The function input is used in the following manner

variable_to_hold_input= input("Prompt to be displayed")

example

```
>>>name=input("Enter your name:- ")
```

Output

```
Enter your name:- Raj Kumar
```

```
>>>age=input("Enter your age :- ")
```

output

```
Enter your age:- 25
```

CHECKING INPUT TYPE USING BUILT IN FUNCTION TYPE()

Note: The input function always returns a value of string type. It can be checked by using **built-in-function type()**.

```
>>>type(name)
```

output

```
<'class str'>
```

```
>>>type(age)
```

```
<'class str'>
```

we can not make arithmetic calculation with age at this moment.

```
>>>age=age+1
```

Type Error: mut be str, not int 

TypeError is the error when we try to perform arithmetic operation with data type not suitable for operation.

READING NUMBERS USING INPUT()

To read numbers using input function we need to do the following

1. Read in the value using input() function
2. And then use **int()** or **float()** function with the read value to change the type of input value to **int** or **float** respectively.

```
>>>age=input("Enter age:- ")
```

output

```
Enter age:- 25
```

```
>>>age=int(age)
```

```
>>>type(age)      # type of age changed from str to int using explicit type casting
```

output

```
<'class int'>
```

```
age=age+10        #valid
```

READING NUMBERS USING INPUT()

These two statements can be combined together

```
>>>age=int(input("Enter your age:- "))
```

output

```
Enter your age:- 30
```

```
>>>type (age)
```

```
<'class int'>
```

Similarly to read a float value use the following syntax

```
>>>radius=float(input("Enter radius of a circle:- "))
```

```
>>>type(radius)
```

output

```
<'class float'>
```

READING NUMBERS USING INPUT()

Note:

While entering numeric values through input() along with int() / float() make sure that you enter values that are convertible to the target type. Otherwise python will raise an error.

Example

```
>>>percentage=float(input("Enter marks percentage:- "))
```

output

Enter marks percentage:- 75.25 percent ← not compatible for conversion into float

ValueError: could not convert string to float: '73 percent'

OUTPUT USING PRINT()

Built in function print() is used to show output on screen.

It can be used in various ways

```
>>>print("Hello")
```

output

Hello

```
>>>print("My name is ", "Vijay Kumar")
```

output

My name is Vijay Kumar

```
>>>print("My", "Name", "is", "Amit", sep='...')
```

Output

My...Name...is...Amit

OUTPUT USING PRINT()

```
>>>print("Two added to three yield ",2+3)
```

Output

```
Two added to three yield 5
```

```
>>>print("Hello\nFriends")
```

output

```
Hello
```

```
Friends
```

```
>>>print(17.5)
```

output

```
17.5
```

A print() function without any value or name or expression prints a blank line.

Thanks for Watching
This Presentation