

Python - Input Statements

Python Inputs

The input function is a simple way to get data from user. Here is example :

In [5]:

```
input('What is your name?')
```

What is your name?Pravin

Out[5]:

'Pravin'

The string specified in the input function serves as message to the user about what needs to be keyed in. Whatever is entered by user is treated as string only. If number is entered by user, still it will be considered as string. For further processing it needs to be type casted to the appropriate data type.

In [6]:

```
input('What is your age?')
```

What is your age?34

Out[6]:

'34'

The user input can be saved as part of variable.

```
variable_name = input('message to the user')
```

In [8]:

```
name = input('What is your name?')  
print(name)
```

What is your name?pravin
pravin

In [10]:

```
name = input('What is your name?')  
print("Welcome", name)
```

What is your name?Pravin
Welcome Pravin

Check type of input variable

In [11]:

```
type(name)
```

Out[11]:

str

In [16]:

```
age = input('What is your age?')
print("You have entered age as ", age)
print("Type : " , type(age))
```

```
What is your age?34
You have entered age as  34
Type :  <class 'str'>
```

Convert type of input variable

In [17]:

```
age = input('What is your age?')
modified_age = int(age)
print("You have entered age as ", modified_age)
print("Type : " , type(modified_age))
```

```
What is your age?23
You have entered age as  23
Type :  <class 'int'>
```

In [19]:

```
salary = input('What is your salary?')
modified_salary = float(salary)
print("You have entered salary as ", modified_salary)
print("Type : " , type(modified_salary))
```

```
What is your salary?123.34
You have entered salary as  123.34
Type :  <class 'float'>
```

Using eval

The eval function convertes the text entered by user into a number without explicit typecasting.

In [20]:

```
my_age = eval(input('What is your age?\n'))
print("You have entered age as ", my_age)
print("Type : " , type(my_age))
```

```
What is your age?
12
You have entered age as  12
Type :  <class 'int'>
```

In [21]:

```
my_salary = eval(input('What is your salary?\n'))
print("You have entered salary as ", my_salary)
print("Type : " , type(my_salary))
```

```
What is your salary?
23.4
You have entered salary as  23.4
Type :  <class 'float'>
```

In [23]:

```
my_total_marks = eval(input('Enter your marks\n'))
#Enter an expression like 23 + 34 + 45
print("You have entered age as ", my_total_marks)
```

```
Enter your marks
23 + 34 + 45
You have entered age as  102
```

Exercise

Q1. Ask the user to enter the number and then print its squares and cubes.

In [24]:

```
#Try it here
```

Q2. Write a program that asks user to input three numbers with separate input statements. Use the variable named total to store the sum of those numbers and avg to store the average of those nummbers. Then output the numbers along with the total and average.

In [27]:

```
#Try it here
```

Q3. Create a salary estimator. Ask user for the basic salary, using it compute HRA as 10% of basic salary, add conveyance allowance as Rs 3500 to it. Output all the salary components on the console.

In [28]:

```
#Try it here
```

In []: