

Input and Output

Day 3 - Python Basics

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Agenda

Python Online Free Ramzan Course 2025
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- 1 Taking user input with `input()`
- 2 Displaying output with `print()`
- 3 Formatting output using f-strings and `.format()`
- 4 Hands-on practice

Taking User Input

- **input()** Function: Used to take input from the user.
- **Syntax:**

```
variable_name = input("Prompt message: ")
```

- **Example:**

```
name = input("Enter your name: ")  
print("Hello, " + name)
```

- **Note:** The `input()` function always returns a string.

Displaying Output

- **print()** Function: Used to display output.
- **Syntax:**

```
print("Message")
```

- **Example:**

```
print("Welcome to Python!")
```

- **Printing Variables:**

```
name = "Ali"
```

```
print("Hello, " + name)
```

Formatting Output with f-strings

- **f-strings (Formatted String Literals):**
 - Introduced in Python 3.6.
 - Easy and readable way to format strings.

- **Syntax:**

```
f"Message {variable}"
```

- **Example:**

```
name = "Ali"
```

```
age = 25
```

```
print(f"My name is {name} and I am {age} years old.")
```

Formatting Output with .format()

- **.format() Method:**
 - Older method for formatting strings.
 - Still widely used.

- **Syntax:**

```
"Message {}".format(variable)
```

- **Example:**

```
name = "Ali"
```

```
age = 25
```

```
print("My name is {} and I am {} years  
old.".format(name, age))
```

Hands-On Practice

- **Task 1:** Write a program to take the user's name and age as input and display a message.

```
name = input("Enter your name: ")  
age = input("Enter your age: ")  
print(f"Hello {name}, you are {age} years old.")
```

- **Task 2:** Write a program to calculate the sum of two numbers entered by the user.

```
num1 = int(input("Enter first number: "))  
num2 = int(input("Enter second number: "))  
sum = num1 + num2  
print(f"The sum is {sum}.")
```

- **Task 3:** Write a program to display a formatted string using `.format()`.

```
book = "Python Programming"  
author = "John Doe"  
print("I am reading {} by {}".format(book,  
author))
```

Recap

- Taking user input with `input()`.
- Displaying output with `print()`.
- Formatting output using f-strings and `.format()`.

Homework

- Write a program to take the user's favorite color and display a message.
- Write a program to calculate the area of a rectangle using user input for length and width.
- Write a program to display a formatted string using both f-strings and `.format()`.

Q&A

- Do you have any questions?
- Share your thoughts or challenges.

Closing

Next class: Basic Operators.