Input & Output

Syntax & Indentation

Input

Defnition

"input()" function is used to take input from the user via the keyboard during the program's execution

Types

- input()
- int()
- float()

Syntax for string Input

String Input

```
# User input for name (string)
name = input("Please enter your name: ")
```

Syntax for integer Input

int Input

```
# User input for age (integer)
age_str = input("How old are you? ")
age = int(age_str) # Convert the input string to an integer
```

int Input

```
# User input for age (integer)
age_str = int(input("How old are you? ") )
```

Syntax for float Input

float Input

```
# User input for weight (float)
weight_str = input("Enter your weight in kilograms: ")
weight = float(weight_str) # Convert the input string to a float
```

float Input

```
# User input for weight (float)
weight_str = float(input("Enter your weight in
kilograms: "))
```

Input:

```
name = input("Enter your name: ")
age = int(input("Enter your age: "))

print("Hello, " + name + "! You are", age, "years old.")
```

Output:

```
Enter your name: Alice
Enter your age: 30
Hello, Alice! You are 30 years old.
```

Input:

```
name = input("Enter your name: ")
age = int(input("Enter your age: "))

print("Hello, " + name + "! You are", age, "years old.")
```

Output:

```
Enter your name: Alice
Enter your age: 30
Hello, Alice! You are 30 years old.
```

Error Handling

Output

Definition

The print() function is used to display output to the console or terminal. It allows you to show information

- *objects
- sep
- end
- file
- flush

Example 1: String Input and Output

Expected Input: "John"

Expected Output: "Hello, John!"

Example 2: Integer Input & output

Expected Input: 5

Expected Output: "You entered: 5"

Example 3: Float Input and Output

Expected Input: 3.14

Expected Output: "Value of Pi: 3.14"

Example 4: Taking Multiple Inputs in a Single Line

Expected Input: 10 20 30

Expected Output: "Sum of Inputs: 60"

Example 5: Specifying Separator in Output

Expected Input: "John", 25

Expected Output: "Name: John, Age: 25"

Example 6: End Parameter in Output

Expected Input: 5

Expected Output: "Countdown: 5 4 3 2 1 Blast Off!"

Example 7: Arithmetic Operators

Expected Input: 10, 5

Expected Output:

"Addition: 15, Subtraction: 5,
Multiplication: 50, Division: 2.0"

Example 8: Comparison Operators

Expected Input: 10, 5

Expected Output:

"10 > 5: True, 10 < 5: False,
10 == 5: False, 10 != 5: True"

Example 9: Logical Operators

Expected Input: True, False

Expected Output:

"True and False: False,
True or False: True, not True: False"

Example 10: Taking Yes/No Input and Handling Case Sensitivity

Expected Input: Yes (or yes, YES, yEs, etc.)

Expected Output: "You entered: Yes"

Example 11: Formatting Output using f-strings

Expected Input: "Alice", 25

Expected Output: "Name: Alice, Age: 25 years"