**PYTHON INBUILT FUNCTION**

1. **if not isinstance(input, str):**

**raise TypeError("Input must be a string.")**

- isinstance(input, str): Checks if the input variable is an instance of the str (string) data type.

- not: Negates the result of the isinstance check. If input is not a string, this condition becomes True.

- raise TypeError: Raises a TypeError exception with a custom error message.

- Error message: "Input must be a string."

This code ensures that the input is a string. If it's not (e.g., an integer, list, etc.), a TypeError exception is raised.

**2.Digit Validation**

**if not input.isdigit():**

**raise ValueError("Input must contain only digits.")**

- input.isdigit(): Checks if all characters in the input string are digits (0-9).

- not: Negates the result of the isdigit check. If input contains non-digit characters, this condition becomes True.

- raise ValueError: Raises a ValueError exception with a custom error message.

- Error message: "Input must contain only digits."

This code ensures that the input string contains only digits (0-9). If it contains non-digit characters (e.g., letters, symbols), a ValueError exception is raised.

**3. Exception Handling**

**except TypeError as e:**

**return f"Error: {e}"**

**except ValueError as e:**

**return f"Error: {e}"**

**except Exception as e:**

**return f"An unexpected error occurred: {e}"**

- except: Catches exceptions raised by the code above.

- TypeError, ValueError, Exception: Specific exception types being caught.

- as e: Assigns the exception object to the variable e.

- return: Returns an error message instead of propagating the exception.

The three except blocks catch different types of exceptions:

1. TypeError: Catches type-related errors (e.g., input is not a string).

2. ValueError: Catches value-related errors (e.g., input contains non-digit characters).

3. Exception: Catches any other unexpected errors.

For each exception type, the code returns a formatted error message using an f-string. The error message includes the exception object's message ({e}).