

## ASSIGNMENT-5

In dumps function what are the parameters that we have and what do they do, explain with small program

```
In [13]: import json
# Define a Python object
my_dict = {"name": "Alice", "age": 25, "country": "USA"}

# Serialize the object into a JSON formatted string
json_string = json.dumps(my_dict)

# Print the resulting JSON string
print(json_string)

{"name": "Alice", "age": 25, "country": "USA"}
```

Write a program to raise an exception.

```
In [14]: # Defining a function that checks if a number is positive
def check_positive(number):
    if number < 0:
        raise ValueError("Number must be positive")

# Call the function with a negative number
try:
    check_positive(-5)
except ValueError as e:
    print(e)

Number must be positive
```

## Normal List Comprehension

```
In [15]: even_numbers = [x for x in range(1, 11) if x % 2 == 0]
print(even_numbers)

[2, 4, 6, 8, 10]
```

## List Comprehension with Conditions

```
In [12]: prime_numbers = [x for x in range(2, 21) if all(x % i != 0 for i in range(2, int(x ** 0.5) + 1))]
print(prime_numbers)

[2, 3, 5, 7, 11, 13, 17, 19]
```

In [ ]: