Python

```
Volume/
├── __init__.py
├── cube.py
├── cuboid.py
└── sphere.py
main.py
```

```python
def cuboid_volume(length, width, height):
    return length * width * height
```

```python
def cube_volume(side):
    return side ** 3
```

```python
import math

def sphere_volume(radius):
    return (4/3) * math.pi * radius ** 3
```

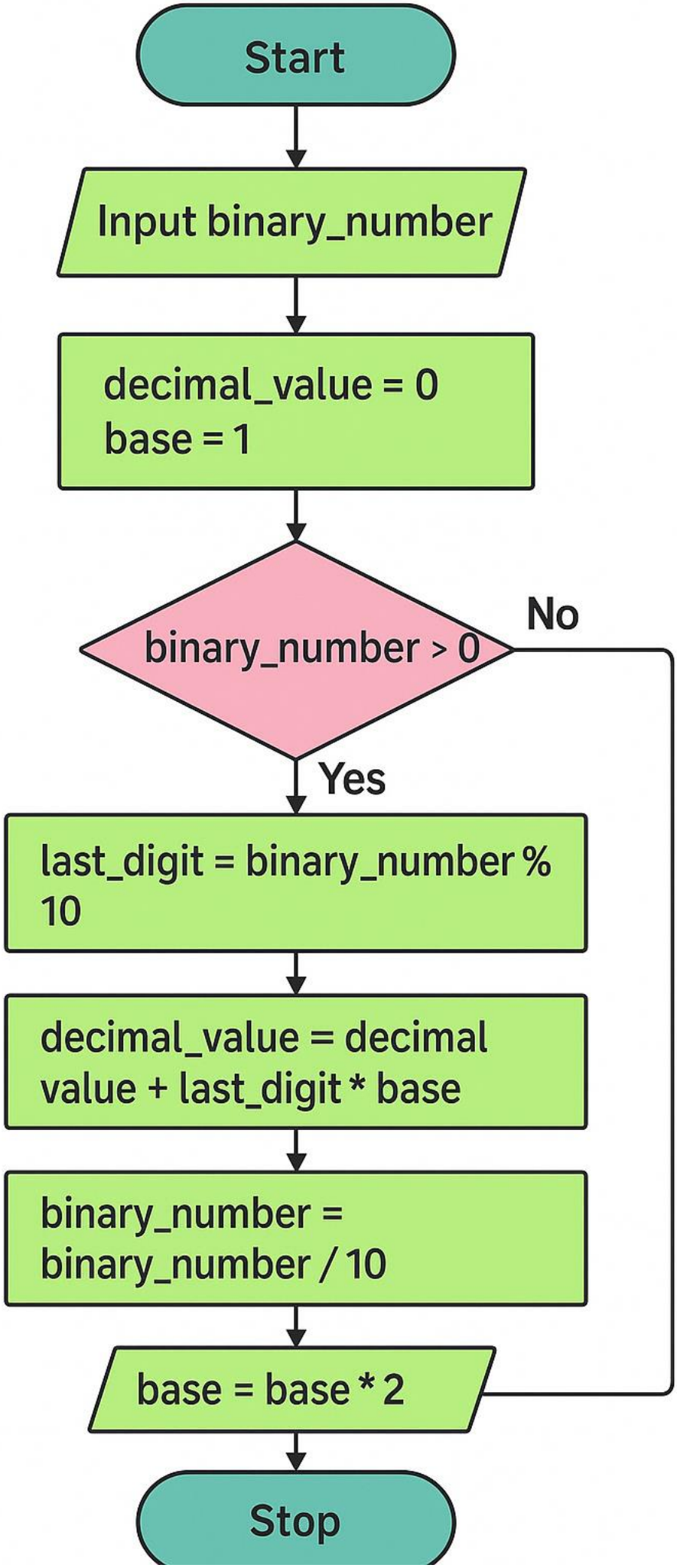
```python
def my_coro():
    yield "First"
    yield "Second"

gen = my_coro()
print(next(gen))  # Output: First
print(next(gen))  # Output: Second
```

```python
from Volume import cube, cuboid, sphere

side = 3
print("Volume of Cube:", cube.cube_volume(side))

length, width, height = 5, 4, 3
print("Volume of Cuboid:", cuboid.cuboid_volume(length, width, height))

radius = 2
print("Volume of Sphere:", sphere.sphere_volume(radius))
```

```python
import math
from collections import Counter
import os

# 1. Square root using lambda
numbers = [4, 9, 16, 25]
sqrt = list(map(lambda x: math.sqrt(x), numbers))
print("Square roots:", sqrt)

# 2. Display first n lines of a file
def display_first_n_lines(filename, n):
    with open(filename, 'r') as f:
        for i in range(n):
            print(f.readline().strip())

# 3. Display file size in bytes
def file_size(filename):
    size = os.path.getsize(filename)
    print(f"Size of '{filename}' is {size} bytes")

# 4. Display frequency of each word in a file
def word_frequency(filename):
    with open(filename, 'r') as f:
        words = f.read().split()
        freq = Counter(words)
        for word, count in freq.items():
            print(f"{word}: {count}")

# Example usage
filename = "sample.txt"
n = int(input("Enter number of lines to display: "))

display_first_n_lines(filename, n)
file_size(filename)
word_frequency(filename)
```

```python
# (i) Copy content from first.txt to second.txt
with open("first.txt", "r") as f1:
    content = f1.read()

with open("second.txt", "w") as f2:
    f2.write(content)
print("Content copied from first.txt to second.txt")

# (ii) Reading a file
with open("second.txt", "r") as file:
    data = file.read()
    print("\nContent of second.txt:")
    print(data)

# (iii) Writing into a file
with open("newfile.txt", "w") as f:
    f.write("This is a new file created using Python.")
print("\nData written to newfile.txt")

# (iv) Appending into a file
with open("newfile.txt", "a") as f:
    f.write("\nThis line is appended to the same file.")
print("\nData appended to newfile.txt")
```

```python
x1 = float(input("Enter x1: "))
y1 = float(input("Enter y1: "))
x2 = float(input("Enter x2: "))
y2 = float(input("Enter y2: "))

if x2 == x1:
    print("Slope is undefined (vertical line).")
else:
    slope = (y2 - y1) / (x2 - x1)
    print(f"Slope of the line: {slope}")

    if slope > 0:
        print("Slope is Positive.")
    elif slope < 0:
        print("Slope is Negative.")
    else:
        print("Slope is Zero.")
```


Start
Input binary_number
decimal_value = 0
base = 1
binary_number > 0
No
Yes
last_digit = binary_number % 10
decimal_value = decimal value + last_digit * base
binary_number = binary_number / 10
base = base * 2
Stop