# **Python Practical Program code (short and efficient)**

## 1. Area and Perimeter of a Circle

```
import math
r = float(input("Enter Radius:"))
print(f"Area: {math.pi * r**2:.2f}, Perimeter: {2 * math.pi * r:.2f}")
```

## 2. Fibonacci Series

```
a, b, n = 0, 1, int(input("Enter number of fibo:")) for _ in range(n): print(a); a, b = b, a + b
```

#### 3. GCD of Two Numbers

```
a, b = map(int, input("Enter Num1 space Num2:").split()) while b: a, b = b, a % b print(a)
```

## 4. Prime Number Check

```
n = int(input("Enter Number:"))
print("Prime" if n > 1 and all(n % i for i in range(2, int(n**0.5) + 1)) else "Not Prime")
```

# 5. Sum of Squares of N Numbers

```
print(sum(i**2 for i in range(1, int(input("Enter value:"))+1)))
```

## 6. Sum of Elements in an Array

print(sum(map(int, input("Enter multi numbers with space:").split())))

#### 7. Largest Element in an Array

print(max(map(int, input("Enter multiple numbers with space:").split())))

#### 8. Palindrome Check

```
s = input("Enter string name:"); print("Palindrome" if s == s[::-1] else "Not a Palindrome")
```

#### 9. Basic List Input

```
lst = list(map(str, input("Enter list of string:").split())); print("List:", lst)
```

# 10. List Operations: Length, Reverse, Copy, Clear

```
lst = list(map(int, input("Enter multi integers with spaces:").split()))
print(len(lst), lst[::-1], lst[:], [])
```