

Python Programs (22/04/2025 - 06/05/2025)

1. Print Hello World

```
print("Hello world!")
```

2. Sum of Two Numbers

```
a = int(input("Enter first number: "))
b = int(input("Enter second number: "))
print("Sum is:", a + b)
```

3. Area of a Circle

```
import math
r = float(input("Enter radius: "))
area = math.pi * r ** 2
print("Area of the circle is:", area)
```

4. Check Even or Odd

```
num = int(input("Enter a number: "))
if num % 2 == 0:
    print("Even number")
else:
    print("Odd number")
```

5. Display 1 to 10 using while loop

```
i = 1
while i <= 10:
    print(i)
    i += 1
```

6. Even Numbers Between x and y

```
x = int(input("Enter start number: "))
y = int(input("Enter end number: "))
for i in range(x, y + 1):
    if i % 2 == 0:
        print(i)
```

7. Display List Elements using for loop

```
my_list = [1, 2, 3, 4, 5]
for item in my_list:
    print(item)
```

8. Swap Two Numbers Using Function

```
def swap(a, b):
    print("Before swap: a =", a, "b =", b)
```

```
a, b = b, a
print("After swap: a =", a, "b =", b)

swap(5, 10)
```

9. Greatest of 3 Numbers

```
def greatest(a, b, c):
    return max(a, b, c)

print("Greatest is:", greatest(10, 20, 15))
```

10. Factorial of a Number

```
num = int(input("Enter a number: "))
factorial = 1
for i in range(1, num + 1):
    factorial *= i
print("Factorial is:", factorial)
```

11. Cube of Numbers from 1 to n

```
n = int(input("Enter a number: "))
for i in range(1, n + 1):
    print(f"Cube of {i} is {i**3}")
```

12. Basic Calculator

```
a = float(input("Enter first number: "))
b = float(input("Enter second number: "))
op = input("Enter operator (+, -, *, /): ")

if op == '+':
    print("Result:", a + b)
elif op == '-':
    print("Result:", a - b)
elif op == '*':
    print("Result:", a * b)
elif op == '/':
    if b != 0:
        print("Result:", a / b)
    else:
        print("Cannot divide by zero")
else:
    print("Invalid operator")
```

13. Check Leap Year

```
year = int(input("Enter a year: "))  
if (year % 4 == 0 and year % 100 != 0) or (year % 400 == 0):  
    print(year, "is a leap year")  
else:  
    print(year, "is not a leap year")
```