<h1>Python Programming - 2301CS404
<h1>Lab - 2
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01) WAP to print “Hello World..!!”

In [1]:
```
print("Hello World..!!")
```

```
Hello World..!!
```

02) WAP to accept your name and display a welcome message.

Input: Priya

Output: Hello Priya, welcome to Python Lab.

In [3]:
```
name = input("Enter Your Name:")
print(f"Hello {name}, welcome to Python Lab.")
```

```
Hello Smit, welcome to Python Lab.
```

03) WAP to accept three integers and display the numbers, their sum, and average.

Input: 10 20 30

Output:

Numbers: 10 20 30

Sum: 60

Average: 20.0

In [5]:
```
num1 = int(input("Enter Number 1 :"))
num2 = int(input("Enter Number 2 :"))
num3 = int(input("Enter Number 3 :"))

print(num1,num2,num3)

sum = num1 + num2 + num3
print(f"Sum:{sum}")
print(f"Average:{sum / 3}")
```

```
1 2 3
Sum:6
Average:2.0
```

04) WAP to accept name (string), age (int), and percentage (float).

Input : Riya,18,92.5

Output :

Name: Riya Type: <class 'str'>

Age: 18 Type: <class 'int'>

Percentage: 92.5 Type: <class 'float'>

In [10]:
```
name = input("Enter Your Name:")
print(name,"Type:",type(name))

age = int(input("Enter Your Age:"))
print(age,"Type:",type(age))

percentage = float(input("Enter Your Name:"))
print(percentage,"Type:",type(percentage))
```

```
smit Type: <class 'str'>
12 Type: <class 'int'>
56.0 Type: <class 'float'>
```

05) WAP to print following message using custom separator and end.

Ouutput : Python | Programming | Basics###

In [13]:
```
print("Python","Programming","Basics",sep=" | ",end="###")
```

```
Python | Programming | Basics###
```

06) WAP to accept a value and display its value, type, and memory id.

Input : hello

Output :

Value: hello

Type: <class 'str'>

ID: 140712345678912

In [14]:
```
name = input("Enter Your Name:")
print("Value:",name)
print("Type:",type(name))
print("ID:",id(name))
```

```
Value: smit
Type: <class 'str'>
ID: 2479784301920
```

07) WAP to assign a value to a variable, print id, reassign a new value, and print id again.

Output :

Original ID of a: 140712345678912

New ID of a: 140712345678960

In [19]:
```
a = input("Enter value:")
print("Original ID of a:",id(a))
a = input("Enter value: ")
print("New ID of a:",id(a))
```

```
Original ID of a: 140725283696608
New ID of a: 140725283696608
```

08) WAP to print multiple lines using a single print().

Output:

Welcome to Python

This is the second lab

Enjoy coding!

In [24]:
```
print("""
Welcome to Python
this is the second lab
Enjoy coding!
""")
```

```
Welcome to Python
this is the second lab
Enjoy coding!
```

09) WAP to display following table of items with proper alignment.

Output :

Sr No	Name	Subject	Grade	Percentage
1	Nisha Patel	Math	A	92
2	Aarav Modi	Science	B+	85
3	Jiya Shah	English	A+	96

In [72]:
```
print("""
Sr No    Name     Subject   Grade    Precentage
    1 Nisha Patel Math        A              92
    2 Aarav Modi  Science     B+             85
    3 Jiya Shah   English     A+             96
""")
print(f"{'Sr No':^1} {'Name':8} {'Subject':^15} {'Grade':^8} {'Percentage'}")
print(f"{'1':>5} {'Nisha Patel':8} {'Math':^8} {'A':^13} {'92':>9}")
print(f"{'2':>5} {'Aarav Modi':10}{'Science':^15}  {'B+'}  {'85':>13}")
print(f"{'3':>5} {'Jiya Shah':^5} {'English':^16} {'A+'} {'96':>14}")
```

```
Sr No    Name     Subject   Grade    Precentage
    1 Nisha Patel Math        A              92
    2 Aarav Modi  Science     B+             85
    3 Jiya Shah   English     A+             96

Sr No Name          Subject      Grade   Percentage
    1 Nisha Patel   Math          A              92
    2 Aarav Modi    Science       B+             85
    3 Jiya Shah     English       A+             96
```

10) WAP to accept a float number and display with 2 decimals, 3 decimals, and width 10.

Input : 37.2567

Output :

2 decimals: 37.26

3 decimals: 37.257

Width 10: 37.26

In [77]:
```
number = float(input("Enter Number: "))
print(f"2 decimals: {number:.2f}")
```

```
print(f"3 decimals: {number:.3f}")
print(f"Width 10: {number:10.2f}")
```

```
2 decimals: 37.26
3 decimals: 37.257
Width:      37.26
```

11) WAP to accept two integers and display sum, difference, and product using f-strings.

Input : 12 8

Output :

Sum = 20

Difference = 4

Product = 96

In [79]:
```
num1 = int(input("Enter number 1:"))
num2 = int(input("Enter number 2:"))
print(f"Sum = {num1 + num2}")
print(f"Difference = {num1 - num2}")
print(f"Product = {num1 * num2}")
```

```
Sum = 20
Difference = 4
Product = 96
```

12) WAP to accept date in dd mm yyyy format and display in multiple formats.

Input : 01 12 2025

Output :

01/12/2025

2025-12-01

In [89]:
```
dd = input("Enter day:")
mm = input("Enter month:")
yyyy = input("Enter year:")

print(dd,mm,yyyy,sep='/')
print(yyyy,mm,dd,sep='-')
# help(print)
```

```
01/12/2025
2025-12-01
01 12 2025
```

13) WAP to calculate area and perimeter of a circle.

In [8]:
```
import math
radius = float(input("Enter the radius of the circle:"))
area = math.pi * (radius ** 2)
perimeter = 2 * math.pi * radius
print(f"Area of Circle: {area:.2f} square units and Perimeter: {perimeter:.2f} units")
```

```
Area of Circle: 314.16 square units and Perimeter: 62.83 units
```

14) WAP to convert degree into Fahrenheit and vice versa.

In [11]:
```
celsius = float(input("Enter temperature in Celsius: "))
fahrenheit = (celsius * 9/5) + 32
print(f"{celsius} degrees Celsius is equal to {fahrenheit} degrees Fahrenheit.")

fahrenheit = float(input("Enter temperature in fahrenheit: "))
celsius = (fahrenheit - 32) * 5/9
print(f"{fahrenheit} degrees fahrenheit is equal to {celsius} degrees celsius.")
```

```
30.0 degrees Celsius is equal to 86.0 degrees Fahrenheit.
86.0 degrees fahrenheit is equal to 30.0 degrees celsius.
```

15) WAP to get the distance from user into kilometer, and convert it into meter, feet, inches and centimeter.

In [12]:
```
kilometers = float(input("Enter the distance in kilometers (km): "))
print(f"Meters: {kilometers * 1000:.2f} m")
print(f"Feet: {kilometers * 3280.84:.2f} ft")
print(f"Inches: {kilometers * 39370.1:.2f} in")
print(f"Centimeters: {kilometers * 100000:.2f} cm")
```

```
Meters: 1000.00 m
Feet: 3280.84 ft
Inches: 39370.10 in
Centimeters: 100000.00 cm
```