Python Programming - 2301CS404

Lab - 2

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01) WAP to print "Hello World..!!"

In [2]:
```
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 [9]:
```
name = input("Enter Your name :")
print(f"Hello {name}, welcome to Python Lab")
```

```
Hello Priya, 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]:
```
a,b,c = input("Enter three numbers :").split()
a = int(a)
b = int(b)
c = int(c)
sum = a+b+c
avg = float(sum/3)
print("Sum :",sum)
print("Avg :",avg)
```

```
Sum : 60
Avg : 20.0
```

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 [8]:
```
Name,Age,Percentage = input("Enter Name, age and percentage").split()
Age = int(Age)
Percentage = float(Percentage)
print(f"Name: {Name} Type: {type(Name)}")
print(f"Age: {Age} Type: {type(Age)}")
print(f"Percentage: {Percentage} Type: {type(Percentage)}")
```

```
Name: Riya Type: <class 'str'>
Age: 18 Type: <class 'int'>
Percentage: 92.5 Type: <class 'float'>
```

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

Ouutput : Python | Programming | Basics###

In [10]:
```
print("Python","Programming","Basics###",sep=' | ')
```

```
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 [12]:
```
a = input("Enter Msg:")
print("Value:",a)
print("Type:", type(a))
print("ID:", id(a))
```

```
Value: hello
Type: <class 'str'>
ID: 2059143210176
```

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 [13]:
```
a = 10
print("Original ID of a:",id(a))
a = 20
print("New ID of a:",id(a))
```

```
Original ID of a: 140735217382600
New ID of a: 140735217382920
```

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

Output:

Welcome to Python

This is the second lab

Enjoy coding!

In [14]:
```
print("Wwlcome to python\nThis is the second lab\nEnjoy coding!")
```

```
Wwlcome 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

Sr No	Name	Subject	Grade	Percentage
2	Aarav Modi	Science	B+	85
3	Jiya Shah	English	A+	96

In [21]:
```
print(f"{'Sr No':<6} {'Name':^12} {'Subject':<10} {'Grade':<6} {'Percentage':<10}")
print(f"{1:>6} {'Nisha Patel':<12} {'Math':<10} {'A':^6} {92:>10}")
print(f"{2:>6} {'Aarav Modi':<12} {'Science':<10} {'B+':^6} {85:>10}")
print(f"{3:>6} {'Jiya Shah':<12} {'English':<10} {'A+':^6} {96:>10}")
```

```
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 [22]:
```
num = float(input("Enter a float number: "))

print(f"2 decimals: {num:.2f}")
print(f"3 decimals: {num:.3f}")
print(f"Width 10: {num:10.2f}")
```

```
2 decimals: 37.26
3 decimals: 37.257
Width 10:      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 [23]:
```
a = int(input("Enter first number: "))
b = int(input("Enter second number: "))
```

```
print(f"Sum = {a + b}")
print(f"Difference = {a - b}")
print(f"Product = {a * b}")
```

```
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 [26]:
```
dd, mm, yyyy = input("Enter date (dd mm yyyy): ").split()

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

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

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

In [27]:
```
radius = float(input("Enter radius of the circle: "))
pi = 3.1416

area = pi * radius ** 2
perimeter = 2 * pi * radius

print(f"Area = {area:.2f}")
print(f"Perimeter = {perimeter:.2f}")
```

```
Area = 314.16
Perimeter = 62.83
```

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

In [28]:
```
choice = input("Convert (D)egree to Fahrenheit or (F)ahrenheit to Degree? ").upper(

if choice == 'D':
    deg = float(input("Enter temperature in Celsius: "))
    fah = (deg * 9/5) + 32
    print(f"{deg}°C = {fah:.2f}°F")
elif choice == 'F':
    fah = float(input("Enter temperature in Fahrenheit: "))
    deg = (fah - 32) * 5/9
    print(f"{fah}°F = {deg:.2f}°C")
```

```
else:
    print("Invalid choice.")
```

```
45.0°C = 113.00°F
```

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

In [29]:
```
km = float(input("Enter distance in kilometers: "))

meter = km * 1000
feet = km * 3280.84
inches = km * 39370.1
cm = km * 100000

print(f"Meters     = {meter:.2f}")
print(f"Feet       = {feet:.2f}")
print(f"Inches     = {inches:.2f}")
print(f"Centimeter = {cm:.2f}")
```

```
Meters     = 60000.00
Feet       = 196850.40
Inches     = 2362206.00
Centimeter = 6000000.00
```

In [ ]:
```

```