Python Programming - 2301CS404

Lab - 2

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Roll No. - 333

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 [4]:
```
name = input("Enter a Name :");
print(f"Hello {name}, welcome to Python Lab");
```

```
Hello Manu, 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 [7]:
```
# a,b,c = int(intput("Enter a Three Number"));
# Error
a = int(input("Enter a n1 :"));
b = int(input("Enter a n2 :"));
c = int(input("Enter a n3 :"));

print(f"Numbers: {a} {b} {c}")
print(f"Sum:{a+b+c}")
print(f"Average:{(a+b+c)/3}");
```

```
Numbers: 10 20 30
Sum:60
Average: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 [9]:
```
name = str(input("Enter a Name :"));
age = int(input("Enetr a Age :"));
percentage = float(input("ENetr a Percentage :"));

print(f"Name : {name}",f"Type: {type(name)}")
print(f"Age : {age}",f"Type: {type(age)}")
print(f"Percentage : {percentage}",f"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 [17]:
```
print("Python","Programming","Basic",sep=" | ",end="###")
```

```
Python | Programming | Basic###
```

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 [19]:
```
var = input("Enter a Word : ");
print(f"Value:{var}");
print(f"Type:{type(var)}");
print(f"ID:{id(var)}");
```

```
Value:hello
Type:<class 'str'>
ID:2570389449360
```

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 [24]:
```
var = 10;
print(f"Value:{var}");
print(f"Type:{type(var)}");
print(f"Original ID of a:{id(var)}");
var = 20;
print(f"New ID of a:{id(var)}");
var = 10;
print(f"Hellllllll ID of a:{id(var)}");
```

```
Value:10
Type:<class 'int'>
Original ID of a:140719354131656
New ID of a:140719354131976
Hellllllll ID of a:140719354131656
```

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

Output:

Welcome to Python

This is the second lab

Enjoy coding!

In [29]:
```
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 [43]:
```
print(f" {'Sr No':^10}  {'name':>10}  {'subject':>10}  {'Grade':>10}  {'percentage'
print(f" {'1':>10}  {'Nisha Patel':>10}  {'Math':>10}  {'A':>9}  {'92':>10}")
print(f" {'2':>10}  {'Aarav Modi':>11}  {'Science':>10}  {'B+':>10}  {'85':>9}")
print(f" {'3':>10}  {'Jiya Shah':>10}  {'English':>11}  {'A+':>10}  {'96':>9}")
```

```
  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 [31]:
```
num = float(input("Enter a 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 [44]:
```
n1 = int(input("Enter a n1 :"));
n2 = int(input("Enter a n2 :"));
print(f"Sum = {n1+n2}");
print(f"Diffreance = {n1-n2}");
print(f"Product = {n1*n2}");
```

```
Sum = 20
Diffreance = 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 [47]:
```
date = input("Enter a Date (dd mm yyyy) :");
[dd,mm,yyyy] = date.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 [53]:
```
import math

r = float(input("Enter a radius :"))
perimeter = 2 * math.pi * r;
area = math.pi * r * r;
print(f"perimeter = {perimeter}")
print(f"Area = {area}");
```

```
perimeter = 31.41592653589793
Area = 78.53981633974483
```

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

In [55]:
```
deg = float(input("Enter a Degree :"));
fah = float(input("Enter a Fahrenhit : "));

degToFah = (deg * 1.8) + 32;
fahToDeg = (fah - 32)/1.8;

print(f"degToFah : {degToFah}");
print(f"fahToDeg : {fahToDeg}");
```

```
degToFah : 41.0
fahToDeg : 5.0
```

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

In [56]:
```
distKm = int(input("Enter a Distance in Kilometer : "));

meter = (distKm) * 1000;
feet = (distKm) *3280.84;
inch = (distKm) * 39370.1;
centimeter = (distKm) * 100000;

print(f"{distKm} KM = {meter} Meter")
print(f"{distKm} KM = {feet} Feet")
print(f"{distKm} KM = {inch} Inches")
print(f"{distKm} KM = {centimeter} Centimeter");
```

```
5 KM = 5000 Meter
5 KM = 16404.2 Feet
5 KM = 196850.5 Inches
5 KM = 500000 Centimeter
```