

Python for Data Science - 2305CS303

Lab - 1

Roll No. : 111

Name : Dhara Maru

1. WAP to print “Hello World”

```
In [4]: print("Hello World")
```

Hello World

2. WAP to print your address i) using single print ii) using multiple print

```
In [5]: print("Dhara M.", "221B Baker Street", "Delhi, India - 110001", sep="\n")
#multiple print
print("=====")
print("Dhara M")
print("221B Baker Street")
print("Delhi, India - 110001")
```

Dhara M.
221B Baker Street
Delhi, India - 110001
=====
Dhara M
221B Baker Street
Delhi, India - 110001

3. WAP to print addition of 2 numbers (without input function)

```
In [1]: a=10
```

```
b=20
print(a,"+",b," = ",a+b)
```

10 + 20 = 30

4. WAP to calculate and print average of 2 numbers (without input function)

```
In [2]: num1 = 20
num2 = 30
avg = (num1 + num2) / 2
print("Average -",avg)
```

Average - 25.0

5. WAP to add two number entered by user.

```
In [3]: n1 = float(input("Enter first number: "))
n2 = float(input("Enter second number: "))
print("Sum =", n1 + n2)
```

Sum = 30.0

6. WAP to calculate area of circle.

```
In [9]: r = float(input("Enter radius: "))
area = 3.14159 * r * r
print("Area of circle is", area)
```

Enter radius: 30

Area of circle is 2827.431

7. Purposefully raise Indentation Error and Correct it.

```
In [11]: a,b=10,20
#error
if a > b:
print(a)

#corrected
if a>b:
    print("a is greater")
```

```
Cell In[11], line 4
    print(a)
    ^
```

IndentationError: expected an indented block after 'if' statement on line 3

8. WAP to calculate simple interest

```
In [4]: p = float(input("Enter principal amount: "))
r = float(input("Enter rate: "))
t = float(input("Enter time period: "))
si = (p * r * t) / 100
print("Simple Interest is", si)
```

Simple Interest is 240.0

9. WAP Calculate Area and Circumference of Circle.

```
In [13]: r = float(input("Enter radius: "))
area = 3.14159 * r * r
circumference = 2 * 3.14159 * r
print("Area is", area)
print("Circumference is", circumference)
```

Enter radius: 30

Area is 2827.431

Circumference is 188.4954

10. WAP to print Multiplication table of given number.

```
In [14]: n = int(input("Enter a number: "))
print(n, "* 1 =", n * 1)
print(n, "* 2 =", n * 2)
print(n, "* 3 =", n * 3)
print(n, "* 4 =", n * 4)
print(n, "* 5 =", n * 5)
print(n, "* 6 =", n * 6)
print(n, "* 7 =", n * 7)
print(n, "* 8 =", n * 8)
print(n, "* 9 =", n * 9)
print(n, "* 10 =", n * 10)
```

Enter a number: 12

12 * 1 = 12

12 * 2 = 24

12 * 3 = 36

12 * 4 = 48

12 * 5 = 60

12 * 6 = 72

12 * 7 = 84

12 * 8 = 96

12 * 9 = 108

12 * 10 = 120

11. WAP to calculate Area of Triangle. (hint: $a = \frac{hb}{2}$)

```
In [5]: b = float(input(" base: "))
```

```
h = float(input(" height: "))
area = 0.5 * b * h
print("Area - ", area)
```

Area - 675.0

12. WAP to convert Degree to Fahrenheit and vice versa.

```
In [6]: c = float(input("Enter Celsius: "))
f = (c * 9/5) + 32
print("Fahrenheit is ", f)

f = float(input("Enter Fahrenheit: "))
c = (f - 32) * 5/9
print("Celsius is - ", c)
```

Fahrenheit is 73.4

Celsius is - 7.222222222222222

13.WAP to calculate total marks and Percentage.

```
In [7]: m1 = float(input("subject 1: "))
m2 = float(input("subject 2: "))
m3 = float(input("subject 3: "))
m4 = float(input("subject 4: "))
m5 = float(input("subject 5: "))
total = m1 + m2 + m3 + m4 + m5
percentage = (total / 500) * 100
print("Total - ", total)
print("Percentage - ", percentage)
```

Total - 340.0

Percentage - 68.0