



Darshan UNIVERSITY

Python Programming - 2301CS404

Lab - 3

Roll No.: 418

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01) WAP to check whether the given number is positive or negative.

```
In [56]: num = float(input("Enter Number : "))
if num > 0:
    print(f"{num} is Positive")
elif num < 0 :
    print(f"{num} is Negative")
else :
    print("Number is Zero.")
```

10.0 is Positive

02) WAP to check whether the given number is odd or even.

```
In [57]: num = float(input("Enter Number : "))
if num % 2 == 0:
    print(f"{num} is Even Number.")
else:
    print(f"{num} is ODD Number.")
```

7.0 is ODD Number.

03) WAP to find out largest number from given two numbers using simple if and ternary operator.

```
In [58]: a = float(input("Enter First Number : "))
b = float(input("Enter Second Number : "))

# if a > b :
#     print(f"{a} is Largest Number.")
# else :
```

```
# print(f"{b} is Largest Number.")
print(f"{a} is Largest Number") if a > b else print(f"{b} is Largest Number.")
```

20.0 is Largest Number.

04) WAP to find out largest number from given three numbers.

```
In [59]: a = float(input("Enter First Number : "))
b = float(input("Enter Second Number : "))
c = float(input("Enter Third Number : "))

if a > b and a > c :
    print(f"{a} is Largest Number.")
elif b > a and b > c :
    print(f"{b} is Largest Number.")
else :
    print(f"{c} is Largest Number.")
```

30.0 is Largest Number.

05) WAP to check whether the given year is leap year or not.

[If a year can be divisible by 4 but not divisible by 100 then it is leap year but if it is divisible by 400 then it is leap year]

```
In [60]: year = int(input("Enter Years : "))
if year % 400 == 0 or year % 4 == 0 and year % 100 != 0 :
    print(f"{year} Leap Years.")
else :
    print(f"{year} Not Leap Years.")
```

2024 Leap Years.

06) WAP in python to display the name of the day according to the number given by the user.

```
In [64]: day = int(input("Enter Day(1-7) : "))
match day :
    case 1 :
        print("Monday")
    case 2 :
        print("Tuesday")
    case 4 :
        print("Wednesday")
    case 5 :
        print("Thursday")
    case 6 :
        print("Friday")
    case 7 :
        print("Saturday")
    case 8:
        print("Sunday & Funday")
    case _:
        print("Enter Valid Number")
```

Thursday

07) WAP to implement simple calculator which performs (add,sub,mul,div) of two no. based on user input.

```
In [65]: a = float(input("Enter First Number : "))
b = float(input("Enter Second Number : "))
op = int(input("Enter Operation(1 for +), (2 for -), (3 for *), (4 for /), (5 for

match op:
    case 1:
        print(a+b)
    case 2:
        print(a-b)
    case 3:
        print(a*b)
    case 4:
        print(a/b)
    case 5:
        print(a%b)
    case _:
        print("Please, Enter Valid Oprations..")
```

200.0

08) WAP to read marks of five subjects. Calculate percentage and print class accordingly.

Fail below 35

Pass Class between 35 to 45

Second Class

between 45 to 60

First Class between 60 to 70

Distinction if more than 70

```
In [44]: m1 = float(input("Enter Marks OF Subject1 : "))
m2 = float(input("Enter Marks OF Subject2 : "))
m3 = float(input("Enter Marks OF Subject3 : "))
m4 = float(input("Enter Marks OF Subject4 : "))
m5 = float(input("Enter Marks OF Subject5 : "))

avg = ((m1+m2+m3+m4+m5)/5)
print(f"Your Percentange is {avg} % ")

if avg > 70:
    print("Distinction")
elif avg > 60 and avg < 70 :
    print("Your Class is First Class")
elif avg > 45 and avg < 60 :
    print("Your Class is Second Class")
elif avg > 35 and avg < 45 :
    print("Pass")
```

```
else :
    print("Fail, Vachjo Ho..!")
```

Your Percentange is 30.0 %
Fail, Vachjo Ho..!

09) WAP to find the second largest number among three user input numbers.

```
In [52]: a = float(input("Enter First Number : "))
b = float(input("Enter Second Number : "))
c = float(input("Enter Third Number : "))
if a > b and a < c :
    print(f"Your First Number {a} is Second Largest Number.")
elif b > a and b < c :
    print(f"Your second Number {b} is Second Largest Number.")
else :
    print(f"Your Third Number {c} is Second Largest Number.")
```

Your second Number 20.0 is Second Largest Number.

10) WAP to calculate electricity bill based on following criteria. Which takes the unit from the user.

- First 1 to 50 units – Rs. 2.60/unit
- Next 50 to 100 units – Rs. 3.25/unit
- Next 100 to 200 units – Rs. 5.26/unit
- above 200 units – Rs. 8.45/unit

```
In [55]: unit = float(input("Enter Your Unit : "))
if unit <= 50 :
    print(unit * 2.60)
elif unit > 50 and unit <= 100 :
    print((50 * 2.60) + ((units - 50) * 3.25))
elif unit > 100 and unit <= 200 :
    print((50 * 2.60) + (50 * 3.25) + ((unit - 100) * 5.26))
elif unit > 200 :
    print(bill = (50 * 2.60) + (50 * 3.25) + (100 * 5.26) + ((units - 200) * 8.45))
else :
    print()
```

555.5

In []: