



Python for Data Science - 2305CS303

Lab - 2

Roll No. : 135

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1. WAP to check whether the given number is Positive or Negative.

```
In [2]: num = int(input("Enter Number : "))
if num > 0:
    print("Number is Positive!")
else:
    print("Number is Negative!")
```

Number is Negative!

2. WAP to check whether the given number is Odd or Even.

```
In [10]: num = int(input("Enter Number : "))
if num%2==0:
    print("Number is Even")
else:
    print("Number is Odd")
```

Number is Odd

3. WAP to find out Largest number from given two numbers using simple if and ternary operator.

```
In [6]: num1 = int(input("Enter Number 1 : "))
num2 = int(input("Enter Number 2 : "))
if num1>num2:
    print("Number 1 is Big!")
else:
    print("Number 2 is big!")

# res = num1 if num1>num2 else num2
# print(res)
```

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4. WAP to find out Largest number from given three numbers.

```
In [8]: num1 = int(input("Enter Number 1 : "))
num2 = int(input("Enter Number 2 : "))
num3 = int(input("Enter Number 3 : "))

if num1>num2 and num1>num3:
    print("Number 1 is Big!")
elif num2>num3:
    print("Number 2 is Big")
else:
    print("Number 3 is Big")
```

Number 2 is Big

5. 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 [2]: year = int(input("Enter Year : "))
if year%4==0 and year%100 != 0 or year%400==0:
    print("This year is Leap Year!")
else:
    print("This year is not Leap Year!")
```

This year is not Leap Year!

6. WAP to display the name of the Day according to the number given by the user.

```
In [3]: choice = int(input("Enter Choice : "))
match choice:
    case 1:
        print("Monday")
    case 2:
        print("Tuesday")
    case 3:
        print("Wednesday")
    case 4:
        print("Thursday")
    case 5:
        print("Friday")
    case 6:
        print("Saturday")
    case 7:
        print("Sunday")
    case _:
        print("Invalid")
```

Tuesday

7. WAP to implement simple Calculator which performs (add,sub,mul,div) of two numbers based on user input.

```
In [28]: num1 = int(input("Enter Number 1 : "))
num2 = int(input("Enter Number 2 : "))
choice = int(input("Enter Choice : "))
if choice == 1:
    res = num1 + num2
    print("Addition is : ",res)
elif choice == 2:
    res = num1 - num2
    print("Substraction is : ",res)
elif choice == 3:
    res = num1 * num2
    print("Multiplication is : ",res)
elif choice == 4:
    res = num1 / num2
    print("Divison is : ",res)
else:
    print("Invalid! ===== Choice Between 1 to 4")
```

Addition is : 110

8. 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
- 200 units – Rs. 8.45/unit

```
In [4]: num = int(input("Enter Number : "))
if num>1 and num<50:
    print("Electricity Bill : ",(num*2.60))
elif num>=50 and num<100:
    print("Electricity Bill : ",(50*2.60)+(num-50)*3.25)
elif num>=100 and num<200:
    print("Electricity Bill : ",(50*2.60)+(50*3.25)+(num-100)*5.26)
elif num>=200:
    print("Electricity Bill : ",(50*2.60)+(50*3.25)+(100*5.26)+((num-200)*8.45))
else:
    print("Invalid!")
```

Electricity Bill : 555.5

In []: