Python Programming - 2301CS404

Lab - 3

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

```python
In [2]: n = int(input("Enter Number for check to IS positive or negative. "))
        if(n>0):
            print("Positve")
        else:
            print("Negative")
```

Negative

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

```python
In [4]: n = int(input("Enter Number for check to IS odd or even "))
        if(n%2==0):
            print("Even")
        else:
            print("odd")
```

Even

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

```python
In [6]: a = 3
        b = 4

        # if(a>b)?print("a large"):print("b large")
        print(a if a>b else b)
```

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

```python
In [7]: a = 3
        b = 4
        c = 5
        if a>b :
```

```python
        if a>c:
            print(a)
        else:
            print(c)
    else:
        if b>c:
            print(b)
        else:
            print(c)
```

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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 [9]:
```python
year = int(2025)
if (year%4 == 0 and year%100 !=0) or (year%400 == 0):
    print("Year IS Leap Year")
else:
    print("Year IS not Leap Year")
```

```
Year IS not Leap Year
```

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

In [17]:
```python
choice = int(input("Enter Day Number"))

match choice:
    case 1:
        print("Monday")
    case 2:
        print("Tuesday")
    case 3:
        print("Wed")
    case 4:
        print("Thru")
    case 5:
        print("Fri")
    case 6:
        print("satur")
    case 7:
        print("sunday")
    case _ :
        print("Invalid Choice")
```

```
Invalid Choice
```

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

```python
In [19]: a = int(input("Enter Number 1 -"))
         n = input("Enter Opt")
         b = int(input("Enter Number 2 -"))

         match n:
             case "add": print(a+b)
             case "sub": print(a-b)
             case "mul": print(a*b)
             case "div": print(a/b)
             case _ : print("invalid")
```

3

In [ ]:

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

```python
In [25]: a = int(input("Enter Mark Sub1"))
         b = int(input("Enter Mark Sub2"))
         c = int(input("Enter Mark Sub3"))
         d = int(input("Enter Mark Sub4"))
         e = int(input("Enter Mark Sub5"))

         total = int(a+b+c+d+e)

         pr = (total/5)
         print(pr)
         # match pr:
         #     case pr<35:
         #         print("fail")
         #     case (pr>35 or pr<45):
         #         print("Pass")
         #     case (pr>45 or pr<60):
         #         print("Second Class")
         #     case (pr>60 or pr<45):
         #         print("First Class")
         #     case _ : print("invalid")
```

224.4

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

```
In [29]: a = 4
         b = 5
         c = 6
         if a>b :
             if a>c:
                 print(c)
             else:
                 print(a)
         else:
             if b>c:
                 print(c)
             else:
                 print(b)
```

5

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

a. First 1 to 50 units – Rs. 2.60/unit

b. Next 50 to 100 units – Rs. 3.25/unit

c. Next 100 to 200 units – Rs. 5.26/unit

d. above 200 units – Rs. 8.45/unit

```
In [33]: unit = float(input("Enter Input"))
         bill = 0
         if unit<=50:
             bill = unit*2.6
         elif unit<=100:
             bill = 50*2.6 + (unit-50)*3.25
         elif unit<=200:
             bill = 50*3.25 + 50*2.6 + (unit-100)*5.26
         elif unit>200:
             bill = 50*2.6 + 50*3.25+ 50*5.26 + +(unit-200)*8.45

         print("Eletrical bill",bill)
```

Eletrical bill 146.25

```
In [ ]:
```