Darshan UNIVERSITY
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Python Programming - 2101CS405

Lab - 2

if..else..

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

In [1]:
```
a = int(input("Enter No:"))
if a>0:
    print("Positive")
else:
    print("Negative")
```

```
Enter No:5
Positive
```

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

In [2]:
```
a = int(input("Enter No:"))
if a%2==0:
    print("EVEN")
else:
    print("ODD")
```

```
Enter No:5
ODD
```

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

In [3]:
```
a = int(input("Enter A:"))
b = int(input("Enter B:"))
if a>b:
    print("Largest NO:",a)
else:
    print("Largets NO:",b)
```

```
Enter A:5
Enter B:5
Largets NO: 5
```

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

In [4]:
```
a = int(input("Enter A:"))
b = int(input("Enter B:"))
c = int(input("Enter C:"))
if a>b:
    if a>c:
        print("Largets NO:",a)
    else:
        print("Largest NO:",c)
else:
    if b>a:
        print("Largest NO:",b)
    else:
        print("Largets NO:",c)
```

```
Enter A:5
Enter B:5
Enter C:5
Largets NO: 5
```

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 [46]:
```
y = int(input("Enter A Year:"))
if y%400==0:
    print("Leap Year")
elif y%4==0 and y%100!=0:
    print("Leap Year")
else:
    print("Not Leap Year")
```

```
Enter A Year:78896
Leap Year
```

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

In [1]:
```
n = int(input("Enter No:"))
if n==1:
    print(n,"==> Sunday")
elif n==2:
    print(n,"==> Monday")
elif n==3:
    print(n,"==> Tuesday")
elif n==4:
    print(n,"==> Wednesday")
elif n==5:
    print(n,"==> Thursday")
elif n==6:
    print(n,"==> Friday")
elif n==7:
    print(n,"==> Saturday")
else:
    print(" please...Enter a valid NO")
```

```
Enter No:5
5 ==> Thursday
```

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

In [47]:
```
a = int(input("Enter A:"))
b = int(input("Enter B:"))
op = input("Enter Opration:(+,-,*,/)")
if op=='+':
    print(a+b)
elif op =='-':
    print(a-b)
elif op=='*':
    print(a*b)
elif op=='/':
    if b!=0:
        print(a/b)
    else:
        print("can't divide by ZERO")
else:
    print("Enter a valid opration")
```

```
Enter A:5
Enter B:4
Enter Opration:(+,-,*,/)-
1
```

08) 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 [8]:
```
u = float(input("Enter Unit:"))
if u>1 and u<=50:
    print(u*2.60)
elif u>=51 and u<=100:
    u1 = 50*2.60 + (u-50)*3.25
    print(u1)
elif u>=100 and u<=200:
    u1 = 50*2.60+50*3.25+(u-100)*5.26
    print(u1)
else:
    u1 = 50*2.60 + 50*3.25 + 100*5.26 + (u-200)*8.45
    print(u1)
```

```
Enter Unit:110
345.1
```

01) 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 [9]:
```
sub1 = int(input("Enter marks Of Subject1:"))
sub2 = int(input("Enter Marks Of Subject2:"))
sub3 = int(input("Enter Marks Of Subject3:"))
sub4 = int(input("Enter Marks Of Subject4:"))
sub5 = int(input("Enter Marks Of Subject5:"))
per  = (sub1+sub2+sub3+sub4+sub5)/5
if per < 35:
    print("FAIL")
elif per>=35 and per<=45:
    print("Pass")
elif per>45 and per<=60:
    print("First Class")
elif per>60 and per<=70:
    print("Second Class")
elif per>60 and per<=70:
    print("First Class")
else:
    print("Didtinction")
```

```
Enter marks Of Subject1:5
Enter Marks Of Subject2:5
Enter Marks Of Subject3:5
Enter Marks Of Subject4:5
Enter Marks Of Subject5:5
FAIL
```

02) WAP to find out the Maximum and Minimum number from given 4 numbers.

In [1]:
```
a = int(input("Enter A:"))
b = int(input("Enter B:"))
c = int(input("Enter C:"))
d = int(input("Enter D:"))
if a>b and a>c and a>d:
    print("Maximum is:",a)
elif b>c and b>d:
    print("Maximum:",b)
elif c>d:
    print("Maximum:",c)
else:
    print("Maximum:",d)
if a<b and a<c and a<d:
    print("Mainimum:",a)
elif b<c and b<d:
    print("Minimum",b)
elif c<d:
    print("Minimum:",c)
else:
    print("Minimum:",d)
```

```
Enter A:5
Enter B:4
Enter C:7
Enter D:8
Maximum: 8
Minimum 4
```

03) WAP to input an integer number and check the last digit of number is even or odd.

In [11]:
```
n = int(input("Enter No:"))
n = n%10;
if n%2==0:
    print("Last No is EVEN")
else:
    print("Last No is ODD")
```

```
Enter No:6
Last No is EVEN
```

04) WAP to determine the roots of the equation ax2+bx+c=0.

In [12]:
```
a = int(input("Enter A:"))
b = int(input("Enter B:"))
c = int(input("Enter C:"))
rootd = (b**2)-4*a*c
if rootd<0:
    print("root is not exixst")
elif rootd>0:
    print("root is exixst and distinct")
else:
    print("root are same")
```

```
Enter A:5
Enter B:4
Enter C8
root is not exixst
```