Darshan UNIVERSITY
योग: कर्मसु कौशलम्

Python Programming - 2301CS404

Lab - 2

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if..else..

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

In [5]:
```
n = int(input("Enter Number :"))
if(n>0):
    print("Positive Number")
else:
    print("Negative Number")
```

```
Negative Number
```

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

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

```
Odd Number
```

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

In [18]:
```
a = int(input("Enter A :"))
b = int(input("Enter B :"))
```

```
if(a>b):
    print("A is greater")
else:
    print("B is greater")

# Ternary
print("A is Greater") if(a>b) else ("b is Greater")
```

```
A is greater
A is Greater
```

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

In [24]:
```
a = int(input("Enter A :"))
b = int(input("Enter B :"))
c = int(input("Enter C :"))

if(a>b):
    if(a>c):
        print("A is Greater")
    else:
        print("C is greater")
else:
    if(b>c):
        print("B is greater")
    else:
        print("C is greater")
```

```
B is greater
```

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 [29]:
```
year = int(input("Enter Year :"))

if((year % 4 == 0 and year % 100 != 0) or (year % 400 == 0)):
    print("Leap Year")
else:
    print("Not Leap year")
```

```
Not Leap year
```

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

In [65]:
```
n = int(input("Enter Number : "))
match n:
    case 1:
        print("Monday")
    case 2:
        print("Tuesday")
    case 3:
        print("Wednesday")
```

```
    case 4:
        print("Thurshday")
    case 5:
        print("Friday")
    case 6:
        print("Saturday")
    case 7:
        print("Sunday")
    case _:
        print("INVALID")
```

```
Saturday
```

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

In [39]:
```
a = int(input("Enter A :"))
b = int(input("Enter B :"))
c = input("Enter Symbole")

if(c=='+'):
    print("ADD =",a+b)
elif(c=='-'):
    print("SUB =",a-b)
elif(c=='*'):
    print("MUL =",a*b)
elif(c=='/'):
    print("DIV =",a/b)
else:
    print("INVALID")
```

```
INVALID
```

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 [53]:
```
a = int(input("Enter Maths Mark :"))
b = int(input("Enter CE Mark :"))
c = int(input("Enter Python Mark :"))
d = int(input("Enter DBMS Mark :"))
e = int(input("Enter WT Mark :"))

Percentage = ((a+b+c+d+e)/500)*100
print("Percentage = ",Percentage,"%")

if(Percentage<35):
    print("FAIL")
elif(Percentage>=35 and Percentage<45):
    print("Pass Class")
elif(Percentage>=45 and Percentage<60):
    print("Second Class")
elif(Percentage>=60 and Percentage<70):
    print("First Class")
```

```
elif(Percentage>=70):
    print("Distinction Class")
```

```
Percentage =  61.0 %
First Class
```

09) Three sides of a triangle are entered through the keyboard, WAP to check whether the triangle is isosceles, equilateral, scalene or right-angled triangle.

In [126…

```
import math
a = int(input("Enter A :"))
b = int(input("Enter B :"))
c = int(input("Enter C :"))

if(a==b==c):
    print("Equilateral")
elif(c**2==(a**2+b**2)):
    print("Right-angle tringle")
elif(a!=b!=c):
    print("Scalence")
elif(a==b or b==c or a==c):
    print("Isosceles")
```

```
Right-angle tringle
```

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

In [73]:

```
a = int(input("Enter A :"))
b = int(input("Enter B :"))
c = int(input("Enter C :"))

if(a>b and a>c):
    if(b>c):
        print("Second Largest is B")
    else:
        print("Second Largest is C")
elif(b>a and b>c):
    if(a>c):
        print("Second Largest is A")
    else:
        print("Second Largest is C")
else:
    if(a>b):
        print("Second Largest is A")
    else:
        print("Second Largest is B")



c
```

```
Second Largest is C
```

Out[73]: 5

11) 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 [105…

```
unit = int(input("Enter Unit : "))

if(unit>=1 and unit<50):
    print("BILL : ",unit*2.60)

elif(unit>=50 and unit<100):
    a = (unit-50)*3.25
    b = 50*2.60
    c = a+b
    print("Bill : ",c)

elif(unit>=100 and unit<200):
    a = (unit-100)*5.26
    b = (50)*3.25
    c = 50*2.60
    print("Bill : ",(a+b+c))
elif(unit>=200):
    a = (unit-200)*8.45
    b = 100*5.26
    c = 50*3.25
    d = 50*2.6
    print("Bill : ",(a+b+c+d))
```

```
Bill :  1452.25
```