Darshan UNIVERSITY

Python Programming - 2301CS404

Lab - 2

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4B-448 8th batch

06-12-2024

if..else..

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

In [5]:
```
Num=int(input("Enter the number: "))
if(Num>0):
    print("Number is positive")

else:
    print("Number is Nagative")
```

```
Number is positive
```

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

In [ ]:
```
 Num=int(input("Enter the number: "))
if(Num/2==0):
    print("Number is even")

else:
    print("Number is odd")
```

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

In [22]:
```
Num1=int(input("Enter the number1: "))
Num2=int(input("Enter the number2: "))
if(Num1>Num2):
    print("Num1 is large")

else:
    print("Num2 is large")

#ternary operator

Num1=int(input("Enter the number1: "))
Num2=int(input("Enter the number2: "))
print("Num1 is large") if(Num1>Num2) else print("Num2 is large")
```

```
Num1 is large
Num2 is large
```

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

In [28]:
```
Num1=int(input("Enter the number1: "))
Num2=int(input("Enter the number2: "))
Num3=int(input("Enter the number3: "))
if(Num1>Num2):
    print("Num1 is large")

elif(Num2>Num3):
    print("Num2 is large")

else:
    print("Num3 is large")
```

```
Num3 is large
```

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 the Year: "))
if((Y%4==0) and (Y%100!=0)) or (Y%400==0):
    print("Given year is leap year")

else:
    print("Given is not a leap year")
```

```
Given year is leap year
```

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

In [54]:
```
Num=int(input("Enter the num: "))
match Num:

    case 1:
        print("Sunday")
    case 2:
        print("Monday")
    case 3:
        print("Tuesday")
    case 4:
        print("Wednesday")
    case 5:
        print("Thursday")
    case 6:
        print("Friday")
    case 7:
        print("Saturday")
    case _:
        print("Not Found")
```

```
Saturday
```

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

In [80]:
```
Num1=float(input("Enter the number1: "))
Num2=float(input("Enter the number2: "))
oprator=(input("Enter the operator(+-*/)"))

match oprator:

    case '+':
        sum=Num1+Num2
        print("Sum is ",sum)
    case '-':
        sub=Num1-Num2
        print("Substract is ",sub)
    case '*':
        mul=Num1*Num2
        print("Multiplication is ",mul)
    case '/':
        div=Num1/Num2
        print("Devision is ",div)
    case _:
        print("Not Found")
```

```
Devision is  2.0
```

8. 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 [3]:
```
Maths=int(input("Enter the marks of maths: "))
Science=int(input("Enter the marks of sci: "))
Gujarati=int(input("Enter the marks of guj: "))
Hindi=int(input("Enter the marks of hindi: "))
English=int(input("Enter the marks of eng: "))

percantage=(Maths+Science+Gujarati+Hindi+English)/5
print("Percantage:",percantage)

if percantage<35:
    print("Fail")

elif 35<percantage<45:
    print("Pass Class")

elif 45<percantage<60:
    print("Pass with second class")

elif 60<percantage<70:
    print("Pass with first class")

else:
    print("Pass with Distinct Class")
```

```
Percantage: 90.0
Pass with Distinct 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 [11]:
```
s1=int(input("enter side 1"))
s2=int(input("enter side 2"))
s3=int(input("enter side 3"))

if s1==s2==s3:
    print("Equilateral Traiangle:")

elif s1==s2!=s3 or s1!=s2==s3 or s1==s3!=s2:
    print("Isoceles Triangle:")

else:
    print("Scalene or Right-angled triangle:")
```

```
Isoceles Triangle:
```

In [ ]:
```

```

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

In [3]:
```
n1 = float(input("Enter the first number: "))
n2 = float(input("Enter the second number: "))
n3 = float(input("Enter the third number: "))

if (n1 > n2 and n1 < n3) or (n1 > n3 and n1 < n2):
    second_largest = n1
elif (n2 > n1 and n2 < n3) or (n2 > n3 and n2 < n1):
    second_largest = n2
else:
    second_largest = n3

print(f"The second largest number is: {second_largest}")
```

```
The second largest number is: 50.0
```

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 [15]:
```
unit=int(input("enter total units"))

if unit<50:
    print("total bill:",(unit*2.60))

elif 50<unit<100:
    print("total bill:",(50*2.60)+(unit-50)*3.25)

elif 100<unit<200:
    print("total bill:",(50*2.60)+(100*3.25)+(unit-100)*5.26)

else:
    print("total bill:",(50*2.60)+(100*3.25)+(200*5.26)+(unit-150)*8.45)
```

```
total bill: 718.0
```

In [ ]: