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Python Programming - 2101CS405

Lab - 2

if..else..

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

In [2]:
```
num=int(input("Enter Number"));
if num>=0:
    print("positive number");
else:
    print("negative number");
```

```
Enter Number-5
negative number
```

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

In [6]:
```
num=int(input("Enter Number"));
if num%2==0:
    print("even number");
else:
    print("odd number");
```

```
Enter Number1
odd number
```

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

In [11]:
```
num1=int(input("Enter Number"));
num2=int(input("Enter Number"));
max=num1 if num1>num2 else num2;
print(max,"is a greater number");
```

```
Enter Number10
Enter Number20
20 is a greater number
```

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

In [13]:
```
num1=int(input("Enter Number"));
num2=int(input("Enter Number"));
num3=int(input("Enter Number"));

if num1>num2 and num1>num3:
    print(num1,"is greate number");

if num2>num1 and num2>num3:
    print(num2,"is greater number");
else:
    print(num3,"is greater number");
```

```
Enter Number10
Enter Number20
Enter Number30
30 is greater number
```

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 [19]:
```
year=int(input("Enter Number"));
if year%4==0 and year%100!=0 or year%400==0:
    print(year,"Leap year");
else:
    print(year,"not leap year");
```

```
Enter Number2022
2022 not leap year
```

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

In [21]:
```
num=int(input("Enter Number"));
if num==1:
    print('sunday');
elif num==2:
    print("monday");
elif num==3:
    print("tue");
elif num==4:
    print("wed");
elif num==5:
    print("thus");
elif num==7:
    print("fri");
else:
    print("satuday");
```

```
Enter Number3
tue
```

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

In [24]:
```
num1=int(input("Enter first number"));
num2=int(input("Enter second number"));
op=str(input("Enter opration"));
if(op=='+'):
    print("the value of ",num1,"+",num2,"=",num1+num2);
if(op=='-'):
    print("the value of ",num1,"-",num2,"=",num1-num2);
if(op=='*'):
    print("the value of ",num1,"*",num2,"=",num1*num2);
if(op=='/'):
    print("the value of ",num1,"/",num2,"=",num1/um2);
```

```
Enter first number10
Enter second number20
Enter opration-
the value of  10 - 20 = -10
```

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</br>
b. Next 50 to 100 units – Rs. 3.25/unit</br>
c. Next 100 to 200 units – Rs. 5.26/unit</br>
d. above 200 units – Rs. 8.45/unit

In [32]:
```
unit=int(input("Enter unit"));
if unit<=50:
    print("electricity bill :",unit*2.60);
elif unit>50 and unit<100:
    bill=50*2.60;
    temp=unit-50;
    print("electricity bill :",temp*3.25);
elif unit>100 and unit<200:
    bill=(50*2.60) + (50*3.25);
    temp=unit-100;
    print("electricity bill :",temp*5.26);
else:
    bill=(50*2.60) + (50*3.25) +(100*5.26);
    temp=unit-200;
    print("electricity bill :",temp*8.45);
```

```
Enter unit75
electricity bill : 81.25
```

01) WAP to read marks of five subjects. Calculate percentage and print class accordingly.

```
Fail below 35 </br>
Pass Class between 35 to 45 </br>
Second Class</br>
between 45 to 60</br>
First Class between 60 to 70</br>
Distinction if more than 70
```

In [31]:
```
sub1=int(input("Enter marks of sub1"));
sub2=int(input("Enter marks of sub2"));
sub3=int(input("Enter marks of sub3"));
sub4=int(input("Enter marks of sub4"));
sub5=int(input("Enter marks of sub5"));
total=sub1+sub2+sub3+sub4+sub5;
per=total/5;
print("your Total marks is",total,"and percenteg is :",per);
if per<35:
    print("Fail below");
elif per>35 and per<45:
    print("Pass Class between");
elif per>45 and per<60:
    print("Second Class");
elif per>60 and per<70:
    print("First Class");
else:
    print("Distinction");
```

```
Enter marks of sub110
Enter marks of sub220
Enter marks of sub330
Enter marks of sub440
Enter marks of sub530
your Total marks is 130 and percenteg is : 26.0
Fail below
```

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

In [37]:
```
num1=int(input("Enter numer 1 :"));
num2=int(input("Enter numer 2 :"));
num3=int(input("Enter numer 3 :"));
num4=int(input("Enter numer 4 :"));
max1=bool(num1>num2 and num1>num3 and num1>num4);
max2=bool(num2>num1 and num2>num3 and num2>num4);
max3=bool(num3>num1 and num3>num2 and num3>num4);
max4=bool(num4>num1 and num4>num2 and num4>num3);

min1=bool(num1<num2 and num1<num3 and num1<num4);
min2=bool(num2<num1 and num2<num3 and num2<num4);
min3=bool(num3<num2 and num3<num1 and num3<num4);
min4=bool(num4<num2 and num4<num3 and num4<num1);
if max1:
    print(num1,"is maximum number");
if min1:
    print(num1,"is minumum number");
if max2:
    print(num2,"is maximum number");
if min2:
    print(num2,"is minumum number");
if max3:
    print(num3,"is maximum number");
if min3:
    print(num3,"is minumum number");
if max4:
    print(num4,"is maximum number");
if min4:
    print(num4,"is minumum number");
```

```
Enter numer 1 :10
Enter numer 2 :20
Enter numer 3 :30
Enter numer 4 :40
10 is minumum number
40 is maximum number
```

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

In [ ]:

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

In [ ]: