Python Programming - 2301CS404

Lab - 3

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

In [2]:
```
n = int(input("enter number :"))
if(n>=0):
    print("number is positive")
else :
    print("number is nagative")
```

```
number is nagative
```

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

In [4]:
```
n = int(input("enter any number :"))
if(n%2==0):
    print("number is even")
else:
    print("number is odd")
```

```
number is even
```

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

In [5]:
```
 a,b = input("enter any two number:").split(",")
a = int(a)
b = int(b)
if(a>b):
    print(a  , " is largest number")
else:
    print(b," is largest number")
```

```
12  is largest number
```

In [19]:
```
 a,b = input("enter any two number:").split(",")
a = int(a)
```

```
b = int(b)
ans =  print(a," is the largest number") if a>b else print(b," is the largest numbe
```

```
12  is the largest number
```

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

In [18]:
```
a,b,c = input("enter any number :").split(",")
a = int(a)
b = int(b)
c = int(c)
res = (print("a is largest") if a>c else print("c is largest") )if a>b  else (print
```

```
b is largest
```

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 [15]:
```
n = int(input("enter any year :"))
if(n%4==0):
    if(n%100!=0):
        print("it is leap year!!")
    else:
        print("it is not leap year")
elif(n%400==0):
    print("year is leap year")
```

```
it is leap year!!
```

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

In [22]:
```
num = int(input("enter any number:"))
n = (num%7)
match n:
    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("good bye!!!!")
```

```
```

```
Wednesday
```

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

In [42]:
```
a,b = input("enter any two number :").split(",")
sign  = input("enter any sign like +,-,*,/")
a = float(a)
b = float(b)

if(sign=='+'):
    print(f"sum of {a} and {b} number is :{a+b}")
elif(sign=='-'):
    print(f"diff of {a} and {b} number is :{a-b}")
elif(sign=='*'):
    print(f"multiplication of {a} and {b} number is :{a*b}")
elif(sign=='/'):
    print(f"division of {a} and {b} number is :{a/b}")
else :
    print("please enter correct sign !!!!!")
```

```
multiplication of 4.0 and 5.0 number is :20.0
```

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 [31]:
```
a,b,c,d,e = input("enter any  five number :").split(",")
a = int(a)
b = int(b)
d = int(d)
c = int(c)
e = int(e)
per = float(((a+b+c+d+e) / 500)*100)
if(per>70):
    print(f"you got distiction!!! with percentage {per}")
elif(60<per<=70):
    print(f"you got first class!!!  with percentage {per}")
elif(45<per<=60):
    print(f"you got second class!!!  with percentage {per}")
```

```
elif(35<=per<=45):
    print(f"you got pass !!!  with percentage {per}")
else:
    print(f"you are fail!!!!  with percentage {per}")
```

```
you are fail!!!!  with percentage 27.0
```

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

In [36]:
```
a,b,c = input("enter any number :").split(",")
a = int(a)
b = int(b)
c = int(c)
if(a>b):
    if(a<c):
        print(f"{a} is the second largest!!!")
    else:
        print(f"{c} is the seond largest!!!")
else :
    if(b<c):
         print(f"{b} is the second largest!!!")
    else:
         print(f"{c} is the second largest!!!")
```

```
6 is the second largest!!!
```

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 [41]:
```
n = int(input("enter unit of bill"))
if(1<=n<50):
    print(f"biill is {n*2.60}")
elif(50<=n<100):
    bill = (50*2.60) + ((n-50)*3.25)
    print(f"bill is {bill}")
elif(100<=n<=200):
     bill = ( 50*2.60) + ((50)*3.25) + ((n-100)*5.26)
     print(f"bill is {bill}")
else:
     bill = ( 50*2.60) + ((50)*3.25) + ((100)*5.26)  + ((n-200)*8.45)
     print(f"bill is {bill}")
### n = unit
```

```
biill is 65.0
```

In [ ]: