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: CSE-1

Course : CSL5401

Lab 1 Assignment

1.WAP to implement a simple calculator. The output should be something like:Select operation.

```
# -*- coding: utf-8 -*-
 def
calculator(num1,num2,chosen):
if chosen==1:
        print(str(num1)+"+"+str(num2)+" =",num1+num2)
elif chosen==2:
        print(str(num1)+"-"+str(num2)+" =",num1-num2)
elif chosen==3:
        print(str(num1)+"x"+str(num2)+" =",num1*num2)
elif chosen==4:
        print(str(num1)+"/"+str(num2)+" =",num1/num2)
else:
        print("invalid choice")
choice=int(input("Enter choice (1,2,3,4):"))
num1=int(input("Enter first Number :"))
num2=int(input("Enter second Number :"))
calculator(num1,num2,choice)
```

```
Python 3.7.9 (bundled)
>>> %Run main.py
 Enter choice (1,2,3,4):3
 Enter first Number :5
 Enter second Number :4
 5x4 = 20
>>>
```

2.WAP to check if a year is leap. Use % operator .

```
year=int(input("Enter Year :"))
 if
year%4==0:
    if year%100==0:
if year%400==0:
            print("Leap year")
else:
            print("Not a leap year")
else:
        print("Leap year")
 else:
    print("Not a leap year")
```

```
Shell
>>> %Run main.py
 Enter Year :1900
 Not a leap year
>>> %Run main.py
 Enter Year :2000
 Leap year
```

3.WAP to find factorial of a number. Use range() function.

```
  num=int(input("Enter Number
:")) fact=1 s='' for i in
range(1,num+1):
    fact*=i
if i!=num:
        s+=str(i)+"x"
else:
        s+=str(i)+"="
 print(s,fact)
```

```
>>> %Run main.py
 Enter Number :6
 1x2x3x4x5x6= 720
>>>
```

4.WAP to shuffle a deck of cards.

```
# -*- coding: utf-8 -*- import random suites =
['Hearts', 'Diamonds', 'Clubs', 'Spades']
count=random.randint(1,13)
suite=random.choice(suites)
print(str(count)+" of",suite)
```

```
>>> %Run main.py
 1 of Hearts
>>> %Run main.py
 4 of Spades
>>> %Run main.py
 4 of Spades
```