#### **MODULES**

A module is collection of varaiable(gv),fun,and classes.

used to re-use fun anywhere in the program or outside of the program by using fun call on

--python has 2 approches to define features of module.--

1.import statemet

2.from .....import stat

### 1.import statemet

a.import modulename

b.import modulename1,modulename2,...modulename-n

c.import module as alias name

d.import module as alias name1,....alias

# 2.from import statement

a.from module name import varname, funname

b.from module name import varname as alias name,funname as alias name,classname as alias name

c.from module name imp

#### module

reused fun anywhere of program or another program by using fun call only by using fun call only

### no of approaches to dev mod

1.import module

n me

2.import m name1,m name 2,m n

a e-n

3.import m name as alia

s name

- 4.import m name1 as alias name,m name2 as alias name, m name-n as alias name.
- 1.from module import var name, fun name, class name
- 2.form module import varn as alias nam, funn as alias name, clan as alias name.

## 3.from aop import addop as a, subop as b, mulop as c.

### 4.form module i

```
In [ ]: #mathsinfo.py
        pi=3.13
        e=2.72
        #hera pi and e are called global var
In [ ]: #se1.py
        import mathsinfo
        print('value of pi=',mathsinfo.pi)
        print('value of e=',mathsinfo.e)
In [ ]: #aop.py
        def sumop(a,b):
            print('sum of {} and {} ={}'.format(a,b,a+b))
        def subop(a,b):
            print('substraction of {} and {} ={}'.format(a,b,a-b))
           print('multiplication of {} and {} ={}'.format(a,b,a*b))
In []: #se2.py
        import aop
        aop.sumop(12,12)
        aop.subop(123,4)
        aop.mulop(23,54)
In [ ]: #se3.py
        import icici
        print('bank name',icici.bname)
        print('bank address',icici.add)
        icici.simpleint()
In [ ]: #icici.py
        bname='icici'
        add='hvd'
        def simpleint():
            p=float(input('enterr your principal amount ='))
            t=float(input('enter yout time ='))
            r=float(input('enter your rate ='))
            si=(p*t*r)/100
            totamt=p+si
            print('='*50)
            print('DETAILS OF SIMPLE INTEREST')
            print('='*50)
            print('rate of principal amount ={}'.format(p))
            print("total time ={}".format(t))
            print('rate of interest ={}'.format(r))
            print('simple interest ={}'.format(si))
            print('total amount ={}'.format(totamt))
In [ ]: #tempCodeRunnerFile.py
        import icici
        print('bank name',icici.bname)
        print('bank address',icici.add)
        icici.simpleint()
In [ ]: #year.py
        from calendar import calendar as c
        year=int(input('enter your year :'))
        print(c(year))
In [ ]: #calenderex1.py
        from calendar import month
        m=int(input('enter your month :'))
        if m in range(1,13):
            y=int(input('enter your year :'))
            print(month(y,m))
In [ ]: #calenderex2.py
        from calendar import month as m1 ,calendar as c
        m=int(input('enter your month :'))
        if m in range(1,13):
            y=int(input('enter year :'))
            print(m1(y,m))
            year=int(input('enter your year :'))
```

```
print(c(year))
In [ ]: #approachex1.py
        import mathsinfo
        import aop
        import icici
        print('='*50)
        print('value of pi', mathsinfo.pi)
        print('value of e',mathsinfo.e)
        print('='*50)
        aop.sumop(12,43)
        aop.subop(23,42)
        aop.mulop(43,23)
        print('='*50)
        print('bank name =',icici.bname)
        print('bank address =',icici.add)
        icici.simpleint()
In [ ]: #approachex2.py
        import mathsinfo,aop,icici
        print('='*50)
        print('value of pi', mathsinfo.pi)
        print('value of e',mathsinfo.e)
        print('='*50)
        aop.sumop(12,43)
        aop.subop(23,42)
        aop.mulop(43,23)
        print('='*50)
        print('bank name =',icici.bname)
        print('bank address =',icici.add)
        icici.simpleint()
In [ ]: #approachex3.py
        import mathsinfo as m
        import aop as a
        import icici as i
        print('='*50)
        print('value of pi =',m.pi)
        print('value of e=',m.e)
        print('='*50)
        a.sumop(12,42)
        a.subop(234,5234)
        a.mulop(4345,5323)
        print('='*50)
        print('bank name =',i.bname)
        print('bank address =',i.add)
        i.simpleint()
In [ ]: #approachex4.py
        from mathsinfo import pi,e
        from aop import sumop, subop, mulop
        from icici import bname,add,simpleint
        print('='*50)
        print("value of pi =",pi)
        print('value of e',e)
        print('='*50)
        sumop(234,53)
        subop(234,5242)
        mulop(2345,4523)
        print('='*50)
        print('bank name =',bname)
        print('bank address =',add)
        simpleint()
```

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