

```

1 class Human:
2     def birth(self):
3         self.gender=input("Enter gender")
4     def naming(self):
5         self.name=input("Enter name:")
6     def intro(self):
7         print("Hi i am a",self.gender,"called",self.name)

```

```

1 h=Human()
2 h.birth()
3 h.gender

```

```

Enter gendermale
'male'

```

```
1 h.naming()
```

```
Enter name:amar
```

```
1 h.name
```

```
'amar'
```

```
1 h.intro()
```

```
Hi i am a male called amar
```

```

1 class Human:
2     def birth(self):
3         print("Reference:",id(self))
4         self.gender=input("Enter gender")
5     def naming(self):
6         self.name=input("Enter name:")
7     def intro(self):
8         print("Hi i am a",self.gender,"called",self.name)

```

```

1 h1=Human()
2 h2=Human()

```

```

1 h1.birth()
2 h2.birth()

```

```

Reference: 140354234205904
Enter gendermale
Reference: 140354234205088
Enter genderfemale

```

```
1 h2.naming()
```

```
Enter name:wonder woman
```

```
1 h1.naming()
```

Enter name:superman

```
1 id(h1)
```

140354234205904

```
1 id(h2)
```

140354234205088

```
1 h1.intro()
```

Hi i am a male called superman

```
1 h2.intro()
```

Hi i am a female called wonder woman

```
1 class Human:
2     def birth(self):
3         print(self)
4         self.gender=input("Enter gender")
5         self.naming()
6     def naming(self):
7         self.name=input("Enter name:")
8     def intro(self):
9         print("Hi i am a",self.gender,"called",self.name)
```

```
1 h=Human()
```

```
2
```

```
1 h.birth()
```

```
< main .Human object at 0x7fa6c445c0d0>
```

```
1 h.intro()
```

```
Hi i am a femal called wonder woman
```

```
1 class Human:
2     def __init__(self):#constructor
3         print("Obejct created:",id(self))
4         self.gender=input("Enter gender")
5         self.name=input("Enter name:")
6     def __str__(self):
7         return "Hi i am a "+self.gender+" called "+self.name
```

```
1 h=Human()
```

```
Obejct created: 140354234129760
Enter gender:female
Enter name:cat woman
```

```
1 print(h)
```

```
<__main__.Human object at 0x7fa6c4449070>
```

```
1 print(h)
```

```
Hi i am a female called cat woman
```

```
1 class Person:
2     def __init__(self):
3         self.name=input("Enter name:")
4     def __del__(self):
5         print("R.I.P",self.name)
```

```
1 p=Person()
```

```
Enter name:heena
R.I.P zeena
```

```
1 #code style 1 :Basic user
2 class Human:
3     def __init__(self):#constructor
4         print("Obejct created:",id(self))
5         self.gender=input("Enter gender")
6         self.name=input("Enter name:")
7     def __str__(self):
8         return "Hi i am a "+self.gender+" called "+self.name
```

```
1 #code style-2 industry manner
2 class Human:
3     def __init__(self,name,gender):#constructor
4         print("Obejct created:",id(self))
```

```

5     self.gender=gender
6     self.name=name
7     def __str__(self):
8         return "Hi i am a "+self.gender+" called "+self.name

```

```

1 n=input("Name:")
2 g=input("Gender:")
3 h=Human(n,g)

```

```

Name:shaktiman
Gender:male
Obejct created: 139730521559920

```

```
1 print(h)
```

```
Hi i am a male called shaktiman
```

```

1 class Person:
2     def __init__(self,gender,name,number):
3         self.gender=gender
4         self._name=name
5         self._number=number
6     def __vibhishan(self):
7         print(self.__number)

```

```
1 p=Person("male","amar",9821601163)
```

```
1 p.__vibhishan()
```

```

-----
AttributeError                                Traceback (most recent call last)
<ipython-input-28-b202dd54045f> in <cell line: 1>()
----> 1 p.__vibhishan()

AttributeError: 'Person' object has no attribute '__vibhishan'

```

SEARCH STACK OVERFLOW

```

1 class Human:
2     count=0
3     def __init__(self,name,gender):#constructor
4         print("Obejct created:",id(self))
5         self.gender=gender
6         self.name=name
7         Human.count+=1
8
9     def __str__(self):
10        return "Hi i am a "+self.gender+" called "+self.name
11
12    def populaion(self):
13        print("Total humans:",Human.count)

```

```
1 h=Human("amar","male")
```

```
Object created: 139730264722256
```

```
1 h2=Human("amrita","female")
```

```
Object created: 139730521677296
```

```
1 h3=Human("samrita","female")
```

```
Object created: 139730521676432
```

```
1 h.populaion()
```

```
Total humans: 3
```

```
1 Human.count
```

```
5
```

```
1 class A:
2     def mA1(self):
3         print("mA1 called")
4     def _mA2(self):
5         print("mA2 called")
6     def __mA3(self):
7         print("mA3 called")
```

```
1 class B(A):
2     def mB1(self):
3         print("mB1 called")
4     def _mB2(self):
5         print("mB2 called")
6     def __mB3(self):
7         print("mB3 called")
```

```
1 obj=B()
```

```
1 obj.__mA3()
```

```
-----
AttributeError                                Traceback (most recent call last)
<ipython-input-52-9c3b559fb3f9> in <cell line: 1>()
----> 1 obj.__mA3()

AttributeError: 'B' object has no attribute '__mA3'
```

SEARCH STACK OVERFLOW

```
1 class A:
2     def my(self):
```

```
3     print("A's my")
4     def myA(self):
5         print("A's")
6 class B:
7     def my(self):
8         print("B's my")
9     def myB(self):
10        print("B's")
11 class C:
12     def my(self):
13         print("C's my")
14     def myC(self):
15         print("C's")
16
```

```
1 class X(B,C,A):
2     def myself(self):
3         print("hi X")
```

```
1 obj=X()
```

```
1 #override
2 class Parent:
3     def welcome(self):
4         print("hello how are you how do you do bla bla")
5     def other(self):
6         print("other things")
7 class Child(Parent):
8     def welcome(self):
9         print("hi")
10    def chill(self):
11        print("just chilling")
12
```

```
1 objc=Child()
2 objp=Parent()
```

```
1 objp.welcome()
```

```
hello how are you how do you do bla bla
```

```
1 obj.welcome()
```

```
hi
```

```
1 class Circle:
2     def readR(self,r):
3         self.r=r
4     def area(self):
5         print("Area of Circle:",3.14*self.r**2)
```

```
1 c=Circle()
2 r=float(input("Read r:"))
3 c.readR(r)
4 c.area()
```

```
Read r:5.6
Area of Circle: 98.4704
```

```
1 class Emp:
2     def setdetails(self,id,name,salary):
3         self.__id=id
4         self.__name=name
5         self.__salary=salary
6     def printdetails(self):
7         print(self.__id,self.__name,self.__salary)
```

```
1 class Emp:
2     def __init__(self,id,name,salary):
3         self.__id=id
4         self.__name=name
5         self.__salary=salary
6     def __str__(self):
7         return str(self.__id)+" "+self.__name+" "+str(self.__salary)
```

```
1 class Emp:
2     count=202300
3     def __init__(self,name,salary):
4         Emp.count+=1
5         self.__id=Emp.count
6         self.__name=name
7         self.__salary=salary
8         print("Record added:ID-->",self.__id)
9     def __str__(self):
10        return str(self.__id)+" "+self.__name+" "+str(self.__salary)
11    def gettempid(self):
12        return self.__id
```

```
1 emplist=[]
2 while True:
3     print("1.Create\n2.Search\n3.Delete\n0.Exit")
4     ch=int(input(":"))
5     if ch==1:
6         n=input("Enter name:")
7         s=float(input("salary:"))
8         e=Emp(n,s)
9         emplist.append(e)
10    elif ch==2:
11        tempid=int(input("Enter id:"))
12        flag=False
13        for i in emplist:
14            if i.gettempid()==tempid:
15                print("Found:")
16                flag=True
17                print(i)
```

```

18         break
19     if flag==False:
20         print("Not Found")
21     elif ch==3:
22         tempid=int(input("Enter id:"))
23         flag=False
24         for i in range(len(emplist)):
25             if emplist[i].gettempid()==tempid:
26                 print("Found:")
27                 flag=True
28                 print("Deleted:",emplist.pop(i))
29                 break
30     if flag==False:
31         print("Not Found")
32
33     elif ch==0:
34         print("bye")
35         break
36     else:
37         print("Wrong choice given")
38
39
40
41

```

```

1.Create
2.Search
3.Delete
0.Exit
:1
Enter name:aaaaa
salary:9000
Record added:ID--> 202304
1.Create
2.Search
3.Delete
0.Exit
:1
Enter name:bbbb
salary:4567
Record added:ID--> 202305
1.Create
2.Search
3.Delete
0.Exit
:3
Enter id:202304
Found:
Deleted: 202304 aaaaa 9000.0
Not Found
1.Create
2.Search
3.Delete
0.Exit
:9
Wrong choice given
1.Create
2.Search
3.Delete

```



```
0.Exit  
:0  
bye
```

```
1 emplist=[]  
2 for i in range(3):  
3     n=input("Enter name:")  
4     s=float(input("salary:"))  
5     e=Emp(n,s)  
6     emplist.append(e)
```

```
Enter name:aaaa  
salary:1111  
Record added:ID--> 202301  
Enter name:bbbb  
salary:2222  
Record added:ID--> 202302  
Enter name:cccc  
salary:3333  
Record added:ID--> 202303
```

```
1 print(emplist)  
2 for i in emplist:  
3     print(i)
```

```
[<__main__.Emp object at 0x7f159401e3d0>, <__main__.Emp object at 0x7f158c1a14f0>, <__main__.Emp object at 0x7f157cac8f40>]  
202301 aaaa 1111.0  
202302 bbbb 2222.0  
202303 cccc 3333.0
```

```
1  
2 n=input("Enter name:")  
3 s=float(input("salary:"))  
4 e1=Emp(n,s)  
5 print(e)#e.printdetails()
```

```
Enter name:amar  
salary:900  
Record added:ID--> 202304  
202303 zeena 8000
```

```
1 e2=Emp("Heman",5000)
```

```
Record added:ID--> 202307
```

```
1 e3=Emp("zeena",8000)
```

```
Record added:ID--> 202308
```

```
1 print(e)
```

```
202303 zeena 8000
```

```
1 class Insan:
2     pass
```

```
1 i=Insan()
```

```
1 setattr(i,"name","xmax")
```

```
1 setattr(i,"__contact",9821601163)
```

```
1 getattr(i,"age","not given")
```

```
'not given'
```

```
1 #super()---->allow access of super class's methods
2 class A:
3     def __init__(self,d1):
4         print("A",d1)
5 class B(A):
6     def __init__(self,d1,d2):
7         super().__init__(d1)
8         print("B",d2)
9 class X(B):
10     def __init__(self,d1,d2,d3):
11         super().__init__(d1,d2)
12         print("X",d3)
13 obj=X(11,22,33)
```

```
A 11
B 22
X 33
```

```
1 class Person:
2     def __init__(self):
3         print("the one")
4     def __init__(self):
5         print("the two")
6     def __init__(self):
7         print("the last")
8     def __del__(self):
9         print("R.I.P",self.name)
```

```
1 p=Person()
```

```
the last
```

```
1 class triangle:
2     def setLH(self,l,h):
3         self.l=l
4         self.h=h
5     def area(self):
6         print("Area is:",(0.5*self.l*self.h))
```

```
1 t=triangle()  
2 l=float(input("L:"))  
3 h=float(input("H:"))  
4 t.setLH(l,h)  
5 t.area()
```

```
L:56  
H:12  
Area is: 336.0
```

```
1 #create a bank class  
2 # has amount,accountno,name  
3 # createaccount(constructor)-user only gives name and amount  
4 # account number auto generated  
5 #withdraw(amount):should not be -ve amount and min  
6 # balance is 2000 else reject transection  
7 #deposit(amount):amount can not be -ve  
8 #checkbalance():shows balance and account holder name  
9  
10 '''  
11 menu driven code to  
12 1 create account  
13 2 withdraw  
14 3 deposit  
15 4 check balance  
16  
17 1---->create by takingvalues and auto generate account number  
18 2/3/4--->ask account number ,search account and then operate
```