

Assignment - 24 Classes and Objects

1. Write a python program to create a user class with 3 properties : name, age, email.

```
class user:
    name='Rohini Singh'
    age=20
    email='miss.rohini09coder@gmail.com'
t1=user()
print(t1.name,t1.age,t1.email,sep="\n")
print()
```

2. Write a python program to create a user class with a method to greet the user.

```
class user:
    def happy():
        print("congratulations")
user.happy()
```

3. Write a python program to create 2 objects of the user class and assign different values.

```
class user:
    def __init__(self,name, course):
        self.name=name
        self.course=course
        print(self.name,"...", self.course)
```

```
t1=user('rohini','python')
t2=user('rashmi','boot camp c++')
```

4. Write a python program to init default values for user object using __init__ method.

```
class user:
    def __init__(self,info,method):
        self.info=info
        self.method=method
    def show_data(self):
        print(self.info ,self.method)
obj=user('list','append')
obj.show_data()
```

5. Write a python program to delete the age property of the user.

```
class rohi:
    age=20
    name='rohini'
r=rohi()
del rohi.age
```

```
#print(r.age)
print(r.name)
```

6. Write a python program to create 3 user objects and find the youngest of all.

```
class youngest:
    def __init__(self,num1):
        self.num1=num1
    def find_youngest(self,self1,self2):
        print((self.num1 if (self.num1>self2.num1) else self2.num1) if (self.num1>self1.num1) else (self1.num1 if (self
1.num1>self2.num1) else self2.num1))
age=youngest(4)
age=youngest(5)
age=youngest(9)

print("youngest in all three is")
age.find_youngest(age,age)
#youngest.find_youngest(age,age,age)
```

7. Write a python program to create a Laptop class with 4 attributes (brand, ram, cpu, hdd) and 2 methods (showConfig() to print the values, __init__() to initialize the values).

```
class laptop:
    def __init__(self,brand,ram,cpu,hdd):
        self.brand=brand
        self.ram=ram
        self.cpu=cpu
        self.hdd=hdd
    def config(self):
        print(self.brand,self.ram,self.cpu,self.hdd,sep="\n")
obj=laptop('apple',8,'i12','Macintosh')
laptop.config(obj)
```

8. WRT 7th Question, create 3 Laptop objects and add them to the list in the sorted order based on the ram size.

```
class laptop:
    def __init__(self,ram):
        self.ram=ram

    def config(self,self1,self2):
        l1=[self.ram,self1.ram,self2.ram]
        l1.sort()
        print(l1)
obj1=laptop(8)
obj2=laptop(16)
obj3=laptop(4)
laptop.config(obj1,obj2,obj3)
```

9. Write a python program to create a School class and 3 instance variables and 1 class variable.

```
class school:
    name="B.V.P.K.U.M.Y"
    def __init__(self,stream,medium,principal):
        self.stream=stream
        self.medium=medium
        self.principal=principal

    def config(self):
        print(self.stream,self.medium,self.principal,sep="\n")
s_1=school("pcm,pcb,art,commerce",'english','Miss.rohinising')
print(s_1.name)
s_1.config()
```

10. Define a class Employee with instance object variables empid, name, salary. Write __init__() method in the class to initialize instance object variables. Also define instance methods to input fields and display field values

```
class Employee:
    def __init__(self):
        self.empid=int(input("enter the id\n"))
        self.name=input("enter the name\n")
        self.salary=int(input("enter the salary\n"))

    def show_data(self):
        print("\n\n",self.empid,self.name,self.salary)
emp=Employee()
emp.show_data()
```