

In [84]:

```
# Python program for Inheritance

#Level 1
class Organization:
    OrganizationName = "Infosys"
    def Org(self):
        print(self.OrganizationName)
```

In [85]:

```
# Level which represented by level one department
class Design(Organization):
    def DSN(self):
        print("Design specific function-LEVEL 2")

class IT(Organization):
    def IT(self):
        print("Information technology specific function-LEVEL 2")

class Finance(Organization):
    FinanceOfficer = ""
    def FIN(self):
        print(self.FinanceOfficer)
```

In [86]:

```
#Level which represented by level two (Design, IT, Finance)
class JointProject(Design, IT):
    def JointProject(self):
        print("This function is in student 3.")

class SubFinance(Finance):
    def SubFinance(self):
        print("Department Name :", self.OrganizationName)
        print("Father :", self.FinanceOfficer)
        print()
        print("Example of Multilevel Inheritance called successfully")
```

In [87]:

```
# Hierarchical
Design = Design()
IT = IT()
Design.DSN()
IT.IT()
Design.DSN()
IT.IT()
```

```
Design specific function-LEVEL 2
Information technology specific function-LEVEL 2
Design specific function-LEVEL 2
Information technology specific function-LEVEL 2
```

In [88]:

```
# Hybrid
JointProject = JointProject()
JointProject.DSN()
JointProject.IT()
```

Design specific function-LEVEL 2
Information technology specific function-LEVEL 2

In [89]:

```
# Multilevel
SubFinance = SubFinance()
SubFinance.OrganizationName = "Infosys Inc."
SubFinance.FinanceOfficer = "Keith Minne"
SubFinance.SubFinance()
```

Department Name : Infosys Inc.
Father : Keith Minne

Example of Multilevel Inheritance called successfully

In [90]:

```
class Organization:
    def __init__(self):
        self.Organization = input("Please give the Organization name: ")
        self.Years = input("Organization serving since : ")
    def Organization(self):
        print("Welcome to :{0}".format(self.Organization))
        print("Serving Since :{0}".format(self.Years))
```

In [91]:

```
class Design(Organization):
    def __init__(self):
        self.VerticalHead = input("Current Vertical Head for Design: ")
        self.Project = input("No. of the ongoing project : ")
    def DSN(self):
        print("Our honourable DSN Vertical Head :{0}".format(self.VerticalHead))
        print("Project undertaken :{0}".format(self.Project))

class IT(Organization):
    def __init__(self):
        self.ProjectName = input("Name of the ongoing project : ")
        self.ProjectManager = input("Name of the project manager : ")
    def IT(self):
        print("Project Name :{0}".format(self.ProjectName))
        print("Project undertaken by PM :{0}".format(self.ProjectManager))

class Finance(Organization):
    def __init__(self):
        self.ChiefFinancier = input("Chief Financier of the Project : ")
        self.SubFinancier = input("sponsor of the Project : ")
    def FIN(self):
        print("Chief Financier of the project :{0}".format(self.ChiefFinancier))
        print("Sponsor :{0}".format(self.SubFinancier))
```

In [92]:

```
class Project(Design, IT, Finance):
    def __init__(self):
        Design.__init__(self)
        self.ProjectStatus = input("Status of the project: ")
        self.Actual = input("No. of Actual days: ")
        self.Pending = input("No. of Remaining days: ")
        IT.__init__(self)
        Finance.__init__(self)
    def Project_details(self):
        print("Project and it's complete attributes")
        Design.DSN(self)
        IT.IT(self)
        Finance.FIN(self)
```

In [93]:

```
ProjectDetails = Project()
ProjectDetails.Project_details()
```

Current Vertical Head for Design: Phil Frederick
No. of the ongoing project : 7
Status of the project: Assumed Completed
No. of Actual days: 21
No. of Remaining days: 7
Name of the ongoing project : MSc Data science
Name of the project manager : Christ University
Chief Financier of the Project : Roshan benazer
sponsor of the Project : Benjamin Frank Wang
Project and it's complete attributes
Our honourable DSN Vertical Head :Phil Frederick
Project undertaken :7
Project Name :MSc Data science
Project undertaken by PM :Christ University
Chief Financier of the project :Roshan benazer
Sponsor :Benjamin Frank Wang

In []: