

Experiment - 10

Aim: Implementation of Data Hiding in Python

Theory:

To hide the data:

The members of the class are declared as private which are accessible inside class the only. To create private data members inside the class, we use double underscore (__) before the data member.

Program:

```
#Parent Class
class Student:
    def __init__(self):          #Constructor of Parent Class
        self.name = "Adams Boi" # Public member
        self.__age = 39         # Private member

#Child Class
class Subject(Student):
    pass

#Object creation
obj = Student()
obj1 = Subject()

#Calling Public member using object
print(obj.name) # No Error
print(obj1.name) # No Error

#Calling Private member using syntax object._ClassName__VariableName
print(obj._Student__age) # To Access the Private member
print(obj1._Student__age) # To Access the Private member

#Private members are not directly accessible
#obj.__age # Error
#obj1.__age # Error

print(obj._Subject__age) # Error
print(obj1._Subject__age) # Error
```

Output:

```
Adams Boi
Adams Boi
39
39
```

Conclusion

Hence, in this experiment the concept of data hiding is implemented.