Quiz 2

- 1. Create an abstract class pen with methods write () and refill () as abstract methods.
 - 1.1. Use the pen class from Q1 to create a concrete class fountain pen with additional method change Nib ().
- 2. Create a class monkey with jump () and bite () methods Create a class human which inherits this monkey class and implements basic animal interface with eat () and sleep methods
- 3. Create a class telephone with () , lift () and disconnected () methods as abstract methods create another class smart telephone and demonstrate polymorphism
- 4. Demonstrate polymorphism using monkey class from Q2.
- 5. Create an interface TV remote and use it to inherit another interface smart TV remote
- 6. Create a class TV which implements TV remote interface from Q5.
- 7. Observe the class diagram below and provide the solution code:

```
Person
              -name:String
              -address:String
              +Person(name:String,address:String)
              +getName():String
              +getAddress():String
              +setAddress(address:String):void
              +toString():String .-----
                                                    "Person[name=?,address=?]"
                      extends
                                                        Staff
               Student
-program:String
                                          -school:String
-year:int
                                          -pay:double
-fee:double
                                         +Staff(name:String,address:String,
+Student(name:String,address:String,
                                            school:String,pay:double)
 program:String,year:int,fee:double)
                                          +getSchool():String
+getProgram():String
                                         +setSchool(school:String):void
                                         +getPay():double
+setPay(pay:double):void
+setProgram(program:String):void
+getYear():int
+setYear(year:int):void
                                         +toString():String •
+getFee():double
+setFee(fee:double):void
                                              "Staff[Person[name=?,address=?],
+toString():String •
                                              school=?,pay=?]"
        "Student[Person[name=?,address=?],
        program=?,year=?,fee=?]"
```