Bài 1:

```
Circle
                           ±varName:type = default-value
-radius:double = 1.0
                           - denotes private access
-color:String = "red"
                           + denotes public access
+Circle()
+Circle(r:double)
+getRadius():double
                           ±methodName(parmName:type,...):retunType
+getArea():double
                Circle
-radius:double = 1.0
-color:String = "red"
+Circle()
+Circle(radius:double)
+Circle(radius:double,color:String)
+getRadius():double
+getColor():String
+setRadius(radius:double):void
+setColor(color:String):void
+toString():String
+getArea():double •
                                         "Circle[radius=?,color=?]"
```

Bài 2:

Bài 3:

Bài 4:

```
Employee
-id:int
-firstName:String
-lastName:String
-salary:int
+Employee(id:int,firstName:String,
  lastName:String,salary:int)
+getID():int
+getFirstName():String
                                        "firstName lastname"
+getLastName():String
+getName():String ●
                                        salary * 12
+getSalary():int
+setSalary(salary:int):void
+getAnnualSalary():int ◆--
                                        Increase the salary by the percent and
+raiseSalary(int percent):int •
                                        return the new salary
+toString():String .
                     "Employee[id=?,name=firstName lastname,salary=?]"
```

Bài 5:

```
InvoiceItem
-id:String
-desc:String
-atv:int
-unitPrice:double
+InvoiceItem(id:String,desc:String,
   qty:int,unitPrice:double)
+getID():String
+getDesc():String
+getQty():int
+setQty(qty:int):void
+getUnitPrice():double
+setUnitPrice(unitPrice:double):void
+getTotal():double •
                                            unitPrice*qty
+toString():String.
          "InvoiceItem[id=?,desc=?,qty=?,unitPrice=?]"
```

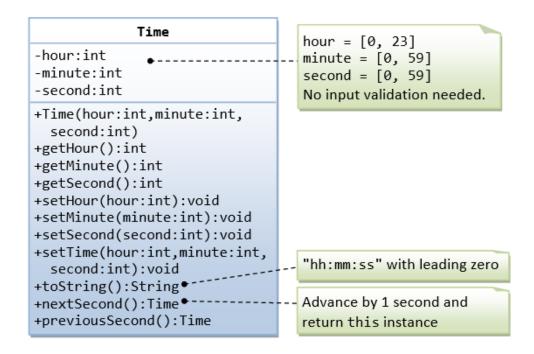
Bài 6:

```
Account
                                      Add amount to balance, return balance
-id:String
-name:String
-balance:int = 0
                                      If amount <= balance
+Account(id:String, name:String),
                                       subtract amount from balance
+Account(id:String,name:String,
                                      else print "amount exceeded"
  balance:int)
                                      return balance
+getID():String
+getName():String
                                      If amount <= balance
+getBalance():int
                                       transfer amount to the given Account
+credit(amount:int):int•
                                      else print "amount exceeded"
+debit(amount:int):int
+transferTo(another:Account,
                                      return balance
  amount:int):int ◆
                                      "Account[id=?,name=?,balance=?]"
+toString():String •
```

Bài 7:

```
Date
                                              day = [1, 31]
-day:int
                                              month = [1, 12]
-month:int
                                              year = [1900, 9999]
-year:int
                                              No input validation needed.
+Date(day:int,month:int,year:int)
+getDay():int
+getMonth():int
+getYear():int
+setDay(day:int):void
+setMonth(month:int):void
+setYear(year:int):void
+setDate(day:int,month:int,year:int):void
                                              "dd/mm/yyyy" with leading zero
+toString():String ◆
```

Bài 8:



Bài 9:

