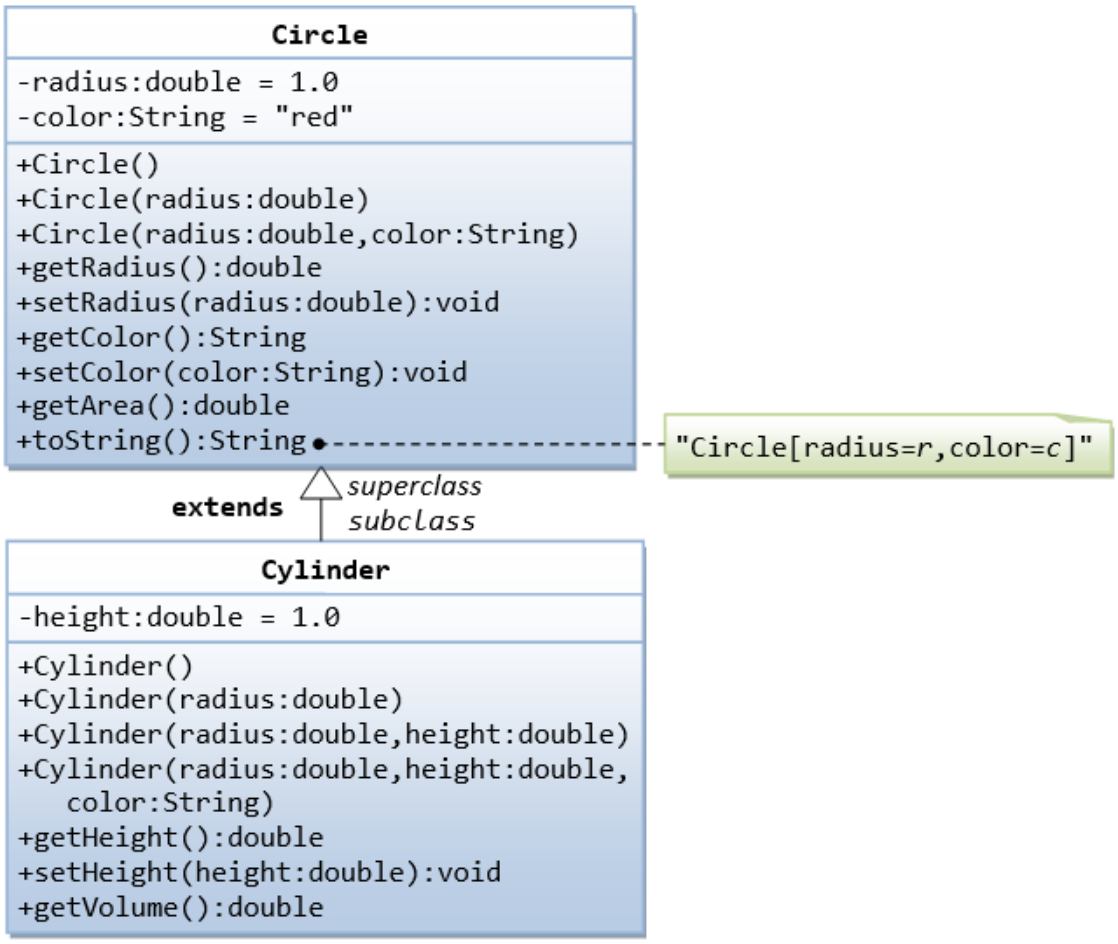
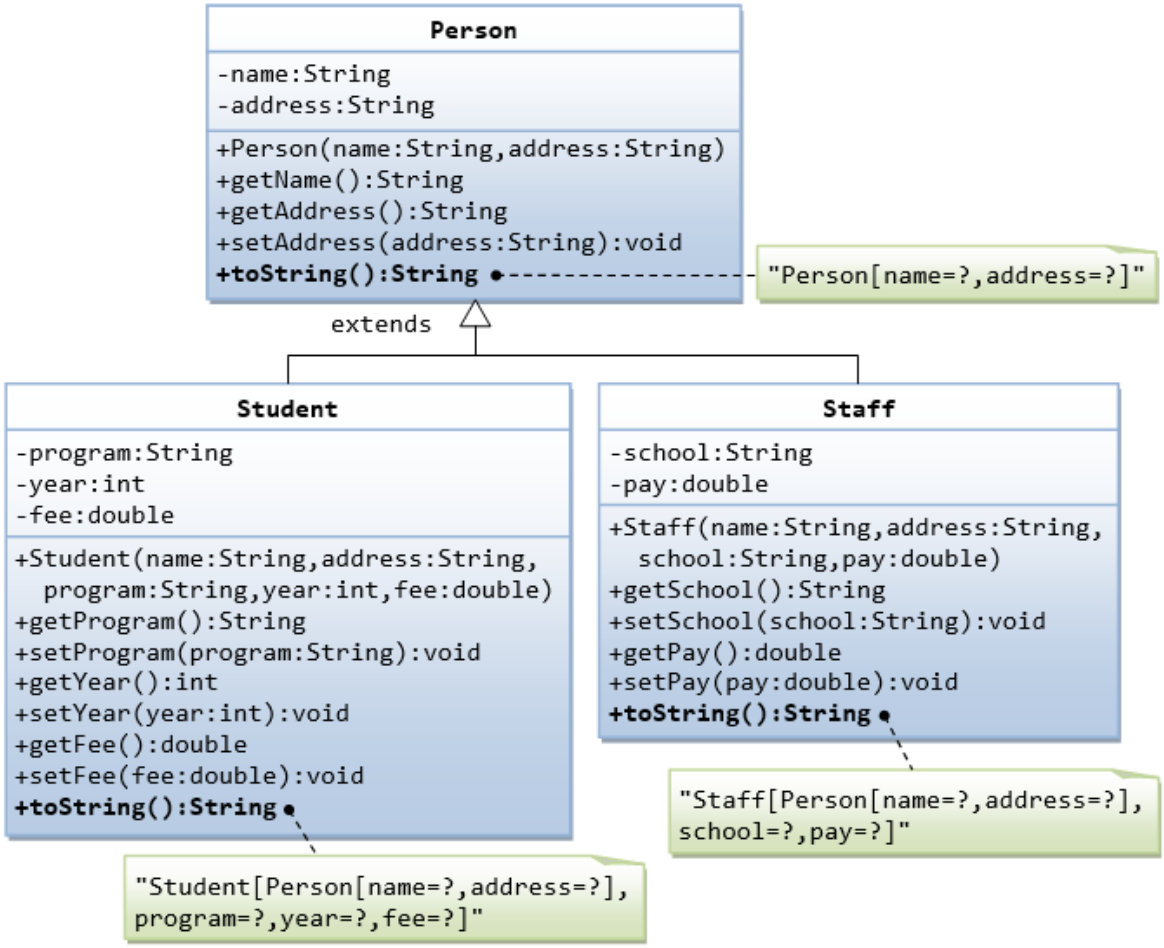
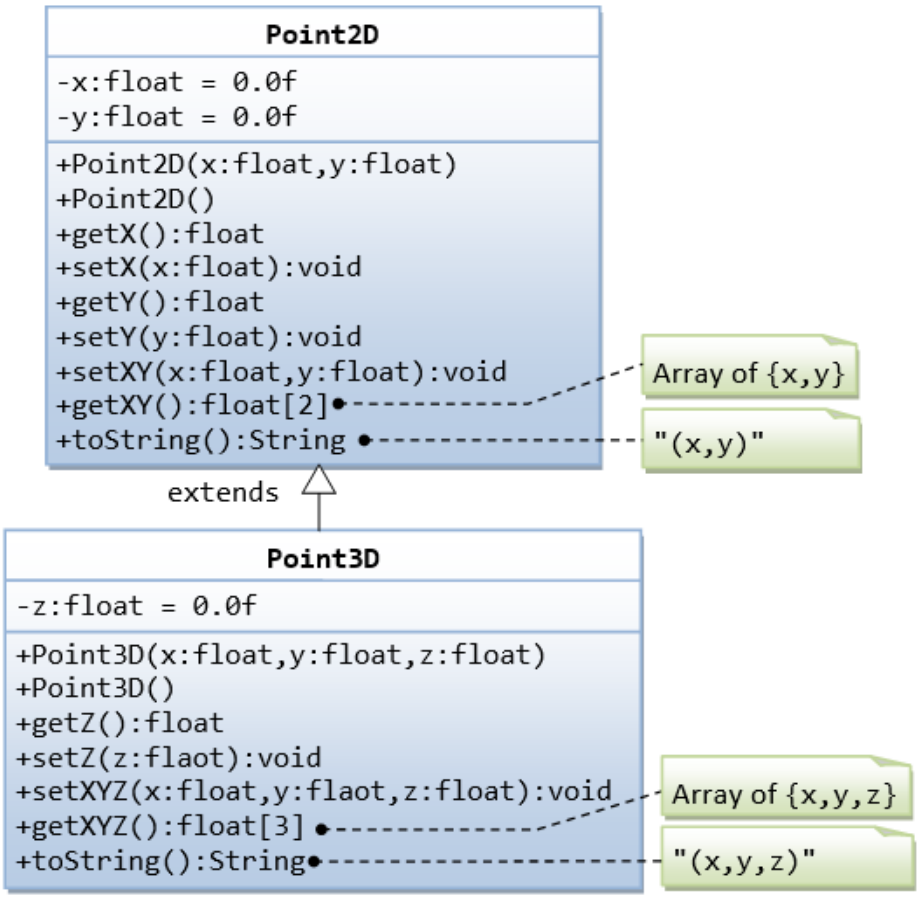
Bài 1:


Circle
-radius:double = 1.0
-color:String = "red"
+Circle()
+Circle(radius:double)
+Circle(radius:double,color:String)
+getRadius():double
+setRadius(radius:double):void
+getColor():String
+setColor(color:String):void
+getArea():double
+toString():String
"Circle[radius=r,color=c]"
extends
superclass
subclass
Cylinder
-height:double = 1.0
+Cylinder()
+Cylinder(radius:double)
+Cylinder(radius:double,height:double)
+Cylinder(radius:double,height:double,
color:String)
+getHeight():double
+setHeight(height:double):void
+getVolume():double

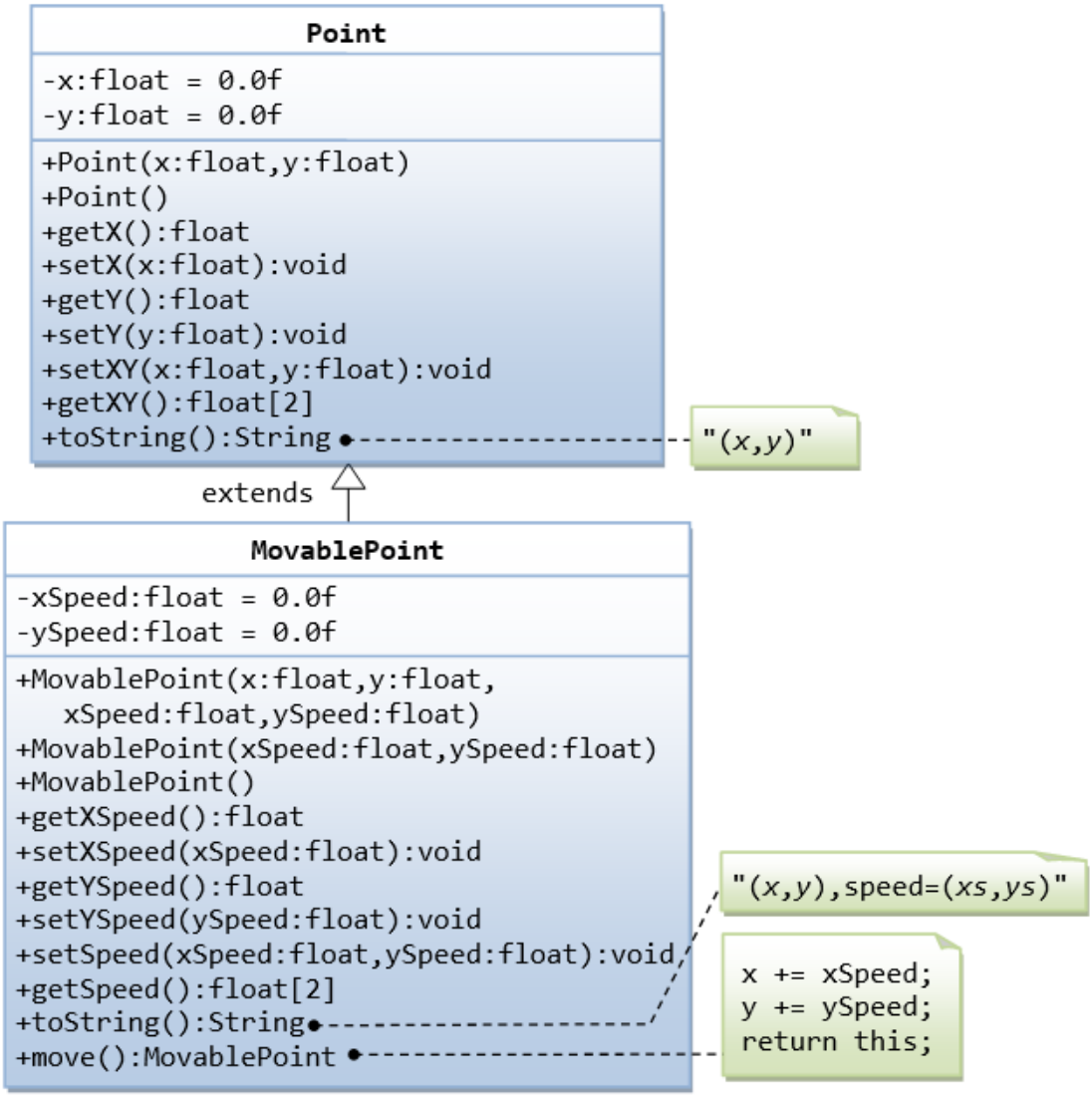
Bài 2:


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

Bài 3:


Point2D
-x:float = 0.0f
-y:float = 0.0f
+Point2D(x:float,y:float)
+Point2D()
+getX():float
+setX(x:float):void
+getY():float
+setY(y:float):void
+setXY(x:float,y:float):void
+getXY():float[2]
+toString():String
Array of {x,y}
"(x,y)"
extends
Point3D
-z:float = 0.0f
+Point3D(x:float,y:float,z:float)
+Point3D()
+getZ():float
+setZ(z:flaot):void
+setXYZ(x:float,y:flaot,z:float):void
+getXYZ():float[3]
+toString():String
Array of {x,y,z}
"(x,y,z)"

Bài 4:


Point
-x:float = 0.0f
-y:float = 0.0f
+Point(x:float,y:float)
+Point()
+getX():float
+setX(x:float):void
+getY():float
+setY(y:float):void
+setXY(x:float,y:float):void
+getXY():float[2]
+toString():String
"(x,y)"
extends
MovablePoint
-xSpeed:float = 0.0f
-ySpeed:float = 0.0f
+MovablePoint(x:float,y:float,
xSpeed:float,ySpeed:float)
+MovablePoint(xSpeed:float,ySpeed:float)
+MovablePoint()
+getXSpeed():float
+setXSpeed(xSpeed:float):void
+getYSpeed():float
+setYSpeed(ySpeed:float):void
+setSpeed(xSpeed:float,ySpeed:float):void
+getSpeed():float[2]
+toString():String
+move():MovablePoint
"(x,y),speed=(xs,ys)"
x += xSpeed;
y += ySpeed;
return this;

Bài 5:

Shape
-color:String = "red"
-filled:boolean = true
+Shape()
+Shape(color:String,filled:boolean)
+getColor():String
+setColor(color:String):void
+isFilled():boolean
+setFilled(filled:boolean):void
+toString():String
"Shape[color=?,filled=?]"
extends
Circle
-radius:double = 1.0
+Circle()
+Circle(radius:double)
+Circle(radius:double,
color:String,filled:boolean)
+getRadius():double
+setRadius(radius:double):void
+getArea():double
+getPerimeter():double
+toString():String
"Circle[Shape[color=?,
filled=?],radius=?]"
Rectangle
-width:double = 1.0
-length:double = 1.0
+Rectangle()
+Rectangle(width:double,
length:double)
+Rectangle(width:double,
length:double, color:String,
filled:boolean)
+getWidth():double
+setWidth(width:double):void
+getLength():double
+setLength(legnth:double):void
+getArea():double
+getPerimeter():double
+toString():String
"Rectangle[Shape[color=?,
filled=?],width=?,length=?]"
Square
+Square()
+Square(side:double)
+Square(side:double,
color:String,filled:boolean)
+getSide():double
+setSide(side:double):void
+setWidth(side:double):void
+setLength(side:double):void
+toString():String
The length and width shall be
set to the same value.
"Square[Rectangle[Shape[color=?,
filled=?],width=?,length=?]]"