Nguyễn Thị Thanh Nhi
CNTT3

Bài 1:

```
package BTLAB03;

public class HinhTron {
	private double r;

	public HinhTron(double r) {
		this.r = r;
	}

	public double getA() {
		return this.r;

	}

	public void setA(double r) {
		this.r = r;
	}
}
package BTLAB03;

public class HinhVuong {
	private double a;

	public HinhVuong(double a) {
		this.a = a;
	}

	public double getA() {
	return this.a;
	}
	public void setA(double a) {
		this.a=a;
	}
}
```

Bài 2:

```
package BTLAB03;

public class Vecto {
	private double x, y, z;

	public Vecto(double x, double y, double z) {
		this.x = x;
		this.y = y;
		this.z = z;
	}

	public Vecto congVecto(Vecto v) {
		double a = this.x + v.x;
		double b = this.y + v.y;
		double c = this.z + v.z;
		return new Vecto(a, b, c);
	}
```

```
	public String toString() {
		return "Vecto [" + x + ", " + y + ", " + z + "]";
	}

	public Vecto truVecto(Vecto v) {
		double a = this.x - v.x;
		double b = this.y - v.y;
		double c = this.z - v.z;
		return new Vecto(a, b, c);
	}

	public Vecto nhanHangSo(double k) {
		double a = this.x * k;
		double b = this.y * k;
		double c = this.z * k;
		return new Vecto(a, b, c);
	}

	public double tichVoHuong(Vecto v) {
		double a = this.x * v.x;
		double b = this.y * v.x;
		double c = this.z * v.x;
		return (a + b + c);
	}
}
```

Bài 3:

```
package BTLAB03;

public class NhanVien {
	private String tenNhanVien;
	private double luongCoBan;
	private double heSoLuong;
	private double luong_MAX;

	public NhanVien(String tenNhanVien, double luongCoBan, double heSoLuong, double
luong_MAX) {
		this.tenNhanVien = tenNhanVien;
		this.luongCoBan = luongCoBan;
		this.heSoLuong = heSoLuong;
		this.luong_MAX = luong_MAX;

	}

	public String gettenNhanVien(String tenNhanVien) {
		return this.tenNhanVien;
	}

	public void settenNhanVien(String tenNhanVien) {
		this.tenNhanVien = tenNhanVien;

	}

	public double getluongCoBan() {
		return this.luongCoBan;
	}

	public void setluongCoBan(double luongCoBan) {
		this.luongCoBan = luongCoBan;

	}
```

```
	public double getheSoLuong() {
		return this.heSoLuong;
	}

	public void setheSoLuong(double heSoLuong) {
		this.heSoLuong = heSoLuong;

	}

	public double getluong_MAX() {
		return this.luong_MAX;
	}

	public void setluong_MAX(double luong_MAX) {
		this.luong_MAX = luong_MAX;

	}

	public double tinhLuong() {
		return this.luongCoBan * this.heSoLuong;
	}

	public boolean tangLuong(double heSoLuong) {
		if (this.luongCoBan * heSoLuong > this.luong_MAX) {
			System.out.println("Không cho phép thay đổi");
			return false;
		}
		return true;
	}

	public void inTTin() {
		System.out.println("ten nhan vien : " + this.tenNhanVien);
		System.out.println("luong cua nhan vien:" + this.luongCoBan);
		System.out.println("he so luong:" + this.heSoLuong);
		System.out.println("luong_MAX:" + this.luong_MAX);
		System.out.println("luong hien tai :" + tinhLuong());
		System.out.println("tang Luong:" + tangLuong(5));
	}
```

LAB03_1

1.

```
package BTLAB03;

public class Point2D {
	private float x;
	private float y;

	public Point2D() {
		this.x= 0.0f;
		this.y=0.0f;
	}
	public Point2D(float x, float y) {
		this.x=x;
		this.y=y;
	}
	public float getX() {
		return this.x;
	}

	public float getY() {
```

```
		return this.y;
	}
}
```
2.
```
package BTLAB03;

public class Triangle {
	private float width;
	private float hegth;

	public Triangle() {
		this.width = 0.0f;
		this.hegth = 0.0f;

	}
	public Triangle(float width, float hegth) {
		this.width=width;
		this.hegth=hegth;
	}

	public float get_width() {
		return this.width;
	}

	public void set_width(float width) {
		 this.width=width;
	}

	public float get_hegth() {
		return  hegth;
	}

	public void set_hegth(float hegth) {
		 this.hegth=hegth;
	}

	public String toString() {
		return ("Triangle ( width = "+get_width()+", height = "+get_hegth()+")");
	}

	public static void main(String[] args) {
		Triangle nhi=new Triangle(4,5);
		nhi.toString();
	}

}
```
3.
```
package BTLAB03;

public class Fraction {
	private int numerator;
	private int denominator;

	public Fraction() {
		this.numerator = 0;
		this.denominator = 1;
	}

	public Fraction(int numerator, int denominator) {
		this.numerator = numerator;
```

```
		this.denominator = denominator;
	}

	public Fraction(Fraction f) {
		this.numerator = f.numerator;
		this.denominator = f.denominator;
	}

	public Fraction add(Fraction f) {
		int a = (this.numerator * f.denominator) + (f.numerator * this.denominator);
		int b = this.denominator * f.denominator;
		return new Fraction(a, b);
	}

	public Fraction sub(Fraction f) {
		int a = (this.numerator * f.denominator) - (f.numerator * this.denominator);
		int b = this.denominator * f.denominator;
		return new Fraction(a, b);
	}

	public Fraction mul(Fraction f) {
		int a = this.numerator * f.numerator;
		int b = this.denominator * f.denominator;
		return new Fraction(a, b);
	}

	public Fraction div(Fraction f) {
		int a = this.numerator * f.denominator;
		int b = this.denominator * f.numerator;
		return new Fraction(a, b);
	}

	public void reducer() {
		int a = this.numerator;
		int b = this.denominator;
		if (a == 0 || b == 0) {
			a = a + b;
		} else {
			while (a != b) {
				if (a > b)
					a = a - b;
				else
					b = b - a;
			}
		}
		int ucln = a;

		int j = this.numerator / ucln;
		int k = this.denominator / ucln;
		System.out.println("tu so = " + j);
		System.out.println("Mau so = " + k);

	}

	public String toString() {
		return "Fraction [numerator=" + numerator + ", denominator=" + denominator + "]";
	}

	public static void main(String[] args) {
		Fraction k = new Fraction(4, 5);
```

```
		Fraction o = new Fraction(3, 4);
		Fraction tong = k.add(o);
		System.out.println(tong);
	}
}
```

LAB03_2

1.

```
package BTLAB03;

public class Student {
	private String stID;
	private String stName;
	private String stClass;

	public Student() {
	}
	public Student (String stID, String stName, String stClass) {
		this.stID=stID;
		this.stName=stName;
		this.stClass=stClass;
	}
	public Student (Student st) {
		this.stID=st.stID;
		this.stName=st.stName;
		this.stClass=st.stClass;
}
	public String getStID() {
		return stID;
	}
	public void setStID(String stID) {
		this.stID = stID;
	}
	public String getStName() {
		return stName;
	}
	public void setStName(String stName) {
		this.stName = stName;
	}
	public String getStClass() {
		return stClass;
	}
	public void setStClass(String stClass) {
		this.stClass = stClass;
	}

	public String toString() {
		return "Student [stID=" + stID + ", stName=" + stName + ", stClass=" + stClass + "]";
	}

	public static void main(String[] args) {
		Student k=new Student("001","khanh","cntt3");
		Student n=new Student(k);
		System.out.println(n);
	}
}
```

2.

```
package BTLAB03;

public class Book {
	private String boCode;
	private String boTitle;
```

```
	private String boAuthor;

	public Book() {
	}

	public Book(String boCode, String boTitle, String boAuthor) {
		this.boCode = boCode;
		this.boTitle = boTitle;
		this.boAuthor = boAuthor;
	}

	public Book(Book bo) {
		this.boAuthor = bo.boAuthor;
		this.boCode = bo.boCode;
		this.boTitle = bo.boTitle;
	}

	public String getBoCode() {
		return boCode;
	}

	public void setBoCode(String boCode) {
		this.boCode = boCode;
	}

	public String getBoTitle() {
		return boTitle;
	}

	public void setBoTitle(String boTitle) {
		this.boTitle = boTitle;
	}

	public String getBoAuthor() {
		return boAuthor;
	}

	public void setBoAuthor(String boAuthor) {
		this.boAuthor = boAuthor;
	}

	public String toString() {
		return boCode + "this.boCode" + boTitle + "this.boTitle" + boAuthor +
"this.boAuthor";
	}
}
```

3.

```
package BTLAB03;

public class LibraryCard {
	private long lbCode;
	private String owner;
	private int borrowCount;

	public LibraryCard() {
	}

	public LibraryCard(long lbCode, String owner, int borrowCount) {
		this.lbCode = lbCode;
		this.owner = owner;
```

```
		this.borrowCount = borrowCount;
	}

	public long getLbCode() {
		return lbCode;
	}

	public void setLbCode(long lbCode) {
		this.lbCode = lbCode;
	}

	public String getOwner() {
		return owner;
	}

	public void setOwner(String owner) {
		this.owner = owner;
	}

	public int getBorrowCount() {
		return borrowCount;
	}

	public void checkOut(int num) {
		if (num > 0) {
			System.out.println("trả sách đã mượn" + num);
		} else {
			System.out.println("không cần phải sách");
		}
	}

	public String toString() {
		return "Lirbarycard   lbCode : " +  this.lbCode +"        "  + "owner : " + this.owner+"
	" + "borrowCount : "+ this.borrowCount  ;
	}

	public static void main(String[] args) {
		LibraryCard l=new LibraryCard(1,"nhi",5);
		System.out.println(l.toString());
	}

}
```