**Lab 2:**

**Câu1 :**

package phuongtrinhbacmot;

import java.util.Scanner;

public class PhuongTrinhBacMot

{

    public static void main(String[] args)

    {

        Scanner s = new Scanner(System.in);

        System.out.println("a= ");

        int a = s.nextInt();

        System.out.println("b= ");

        int b = s.nextInt();

        if(a==0)

        {

            if(b==0)

            {

                System.out.println("Phuong Trinh Co Vo So Nghiem!!!");

            }

            else

            {

                System.out.println("Phuong Tình Vo Nghiem!!!");

            }

        }

            else

                {

                     System.out.printf("Phuong Tình Co Nghiem: %.1f",(float)-b/a);

                }

    }

}

**Câu 2:**

package phuongtrinhbachai;

import static java.lang.Math.sqrt;

import java.util.Scanner;

public class PhuongTrinhBacHai

{

    public static void main(String[] args)

    {

        Scanner s = new Scanner(System.in);

        System.out.println("a= ");

        int a = s.nextInt();

        System.out.println("b= ");

        int b = s.nextInt();

        System.out.println("c= ");

        int c = s.nextInt();

        if(a==0)

        {

            if(b==0)

            {

                if(c==0)

                {

                    System.out.println("Phuong Trinh Co Vo So Nghiem!!!");

                }

                else

                {

                    System.out.println("Phuong Trinh Vo Nghiem!!!");

                }

            }

            else

                {

                     System.out.printf("Phuong Trinh Co Nghiem: %.1f",(float)-c/b);

                }

        }

        else

        {

            int delta= b\*b-4\*a\*c;

            if (delta < 0)

            {

                System.out.println("Vo Nghiem!!!");

            }

            else

            {

                if(delta == 0)

                {

                    System.out.printf("Phuong Trinh Co Nghiem Kep: %.1f" + -b/(2\*a));

                }

                else

                {

                    if(delta > 0)

                    {

                        System.out.println("Co 2 Nghiem Phan Biet");

                        int X1=(int) ((-b+sqrt(delta))/(2\*a));

                        int X2=(int) ((-b-sqrt(delta))/(2\*a));

                    }

                }

            }

        }

    }

}

**Câu 3:**

package com.mycompany.bai3;

import java.util.Scanner;

public class Bai3 {

    public static void main(String[] args)

    {

        Scanner s = new Scanner(System.in);

        System.out.println("Nhap So Dien: ");

        int SoDien = s.nextInt();

        if(SoDien<=50)

        {

            System.out.println("Thanh Tien; " + (SoDien\*1000));

        }

        else

        {

           System.out.println("Thanh Tien; " + (50\*1000+(SoDien-50)\*1200));

        }

    }

}

**Câu 4:**

package menubt;

import static java.lang.Math.sqrt;

import java.util.Scanner;

public class MenuBT {

    public static void menu()

    {

        Scanner s = new Scanner(System.in);

        System.out.println("+-----------------------------+");

        System.out.println("1. Giai phuong trinh bac nhat ");

        System.out.println("2. Giai phuong trinh bac hai ");

        System.out.println("3. Tinh tien dien ");

        System.out.println("4. Ket thuc ");

        System.out.println("+-----------------------------+");

        int Chon\_Chuc\_Nang = Integer.parseInt(s.nextLine());

        switch(Chon\_Chuc\_Nang)

        {

            case 1:

                PhuongTrinhBacMot.giaiPTB1();

                menu();

            case 2:

                PhuongTrinhBacHai.giaiPTB2();

                menu();

            case 3:

                Bai3.tinhTienDien();

                menu();

            case 4:

                System.exit(0);

            default:

                System.out.println("Ket Thuc");

        }

    }

    public static void main(String[] args)

    {

        menu();

    }

}

**Code bài 1:**

package menubt;

import static java.lang.Math.sqrt;

import java.util.Scanner;

class PhuongTrinhBacMot {

    static void giaiPTB1() {

        Scanner s = new Scanner(System.in);

        System.out.println("a= ");

        int a = s.nextInt();

        System.out.println("b= ");

        int b = s.nextInt();

        if(a==0)

        {

            if(b==0)

            {

                System.out.println("Phuong Trinh Co Vo So Nghiem!!!");

            }

            else

            {

                System.out.println("Phuong Tình Vo Nghiem!!!");

            }

        }

            else

                {

                     System.out.printf("Phuong Tình Co Nghiem: %.1f",(float)-b/a);

                }

    }

}

**Code bài 2:**

package menubt;

import static java.lang.Math.sqrt;

import java.util.Scanner;

class PhuongTrinhBacHai {

    static void giaiPTB2() {

        Scanner s = new Scanner(System.in);

        System.out.println("a= ");

        int a = s.nextInt();

        System.out.println("b= ");

        int b = s.nextInt();

        System.out.println("c= ");

        int c = s.nextInt();

        if(a==0)

        {

            if(b==0)

            {

                if(c==0)

                {

                    System.out.println("Phuong Trinh Co Vo So Nghiem!!!");

                }

                else

                {

                    System.out.println("Phuong Trinh Vo Nghiem!!!");

                }

            }

            else

                {

                     System.out.printf("Phuong Trinh Co Nghiem: %.1f",(float)-c/b);

                }

        }

        else

        {

            int delta= b\*b-4\*a\*c;

            if (delta < 0)

            {

                System.out.println("Vo Nghiem!!!");

            }

            else

            {

                if(delta == 0)

                {

                    System.out.printf("Phuong Trinh Co Nghiem Kep: %.1f" + -b/(2\*a));

                }

                else

                {

                    if(delta > 0)

                    {

                        System.out.println("Co 2 Nghiem Phan Biet");

                        int X1=(int) ((-b+sqrt(delta))/(2\*a));

                        int X2=(int) ((-b-sqrt(delta))/(2\*a));

                    }

                }

            }

        }

        }

}

**Code bài 3:**

package menubt;

import java.util.Scanner;

class Bai3 {

    static void tinhTienDien() {

        Scanner s = new Scanner(System.in);

        System.out.println("Nhap So Dien: ");

        int SoDien = s.nextInt();

        if(SoDien<=50)

        {

            System.out.println("Thanh Tien; " + (SoDien\*1000));

        }

        else

        {

           System.out.println("Thanh Tien; " + (50\*1000+(SoDien-50)\*1200));

        }

    }

}

**Bài Tập Thêm:**

**Câu 1:** cho bài toán kiểm tra số chính phương

đầu vào: số nguyên n

đầu ra cho biết n là chính phương(căn bậc 2 của n là nguyên) hay không

package sochinhphuong;

import static java.lang.Math.sqrt;

import java.util.Scanner;

public class SoChinhPhuong

{

    public static void main(String[] args)

    {

        Scanner s=new Scanner(System.in);

        System.out.print("Nhap vao so nguyen n = ");

        int n =s.nextInt();

        float KQ = (float) Math.sqrt(n);

        if (KQ==(int)KQ)

        {

            System.out.println(n + " La So Chinh Phuong");

        }

        else

        {

            System.out.println(n + " Khong La So Chinh Phuong");

                    }

    }

}

**Câu 2:**

xếp loại học tập cho học sinh theo bảng sau

đtb: dưới 5.0, từ 5.0 đến 7.0, từ 7.0 đến dưới 8.0, trên 8.0

Xếp loại: Kém, Trung bình, khá, Giỏi

package xeploai;

import java.util.Scanner;

public class XepLoai

{

    public static void main(String[] args)

    {

        // TODO code application logic here

        Scanner s=new Scanner(System.in);

        System.out.print("Nhap Diem = ");

        int n =s.nextInt();

        if(n<5.0)

        {

           System.out.print("Xep Loai Kem ");

        }

        else

        {

            if(n<=7)

            {

               System.out.print("Xep Loai Tb ");

            }

            else

            {

                if(n<=8)

                {

                    System.out.print("Xep Loai Kha ");

                }

                else

                {

                    System.out.print("Xep Loai Gioi ");

                }

            }

        }

    }

}

**Câu 3:**

Cho bài toán tính giai thừa của số nguyen

đầu vào: số nguyên n

đầu ra: tính n!

sử dụng cấu trúc while, do…while

package GiaiThua;

import java.util.Scanner;

public class GiaiThua

{

    public static void main(String[] args)

    {

        Scanner s = new Scanner (System.in);

        System.out.println("Nhap n");

        int n = s.nextInt();

        float gt = 1 ;

        do

        {

          for(int i=2;i<=n;i++)

          {

              gt \*= i;

          }

        }while (n==0||n==1);

        System.out.println("N giai thua la; "+ gt);

    }

}