**LAB02:**

1. **Tính phương trình bậc 1**

package TaoMenu;

import java.util.Scanner;

class ptb1 {

public static void giaiPTB1() {

Scanner scn = new Scanner(System.in);

int a, b;

System.out.println("Nhap vao 2 so a va b: ");

a = scn.nextInt();

b = scn.nextInt();

if (a == 0) {

if (b == 0) {

System.out.println("Phuong trinh vo so nghiem");

} else {

System.out.println("Phuong trinh vo nghiem");

}

} else {

float x = (float) -b / a;

System.out.println("nghiem cua phuong trinh bac 1 la " + x);

}

}

}

1. **Tính phương trình bậc 2**

package TaoMenu;

import java.util.Scanner;

class ptb2 {

public static void giaiPTB2() {

Scanner scn = new Scanner(System.in);

int a, b, c;

System.out.println("Nhap vao a,b,c: ");

a = scn.nextInt();

b = scn.nextInt();

c = scn.nextInt();

if (a == 0) {

if (b == 0) {

if (c == 0) {

System.out.println("Phuong trinh vo so nghiem");

} else {

System.out.println("Phuong trinh vo nghiem");

}

} else {

float x = (float) -c / b;

System.out.println("nghiem cua phuong trinh tren la " + x);

}

} else {

float delta = (float) b \* b - 4 \* a \* c;

if (delta < 0) {

System.out.println("Phuong trinh vo nghiem");

} else if (delta == 0) {

System.out.println("Phuong trinh co nghiem kep");

float Xk = (float) -b / 2 \* a;

System.out.println("nghiem cua pt la Xk: " + Xk);

} else {

System.out.println("Phuong trinh co 2 nghiem phan biet");

float X1 = (float) (-b + Math.sqrt(delta)) / 2 \* a;

float X2 = (float) (-b - Math.sqrt(delta)) / 2 \* a;

System.out.println("vay phuong trinh bac 2 co nghiem lan luot la X1 va X2: " + X1 + "va" + X2);

}

}

}

}

1. **Tính tiền điện**

package TaoMenu;

import java.util.Scanner;

class tinhtiendien {

public static void tTD() {

Scanner scn = new Scanner(System.in);

float soDien;

System.out.println("Nhap soDien can tinh: ");

soDien = scn.nextFloat();

if (soDien < 50) {

float tien = soDien \* 1000;

System.out.println("soDien can tinh la " + tien);

} else {

float tien = (soDien \* 1000) + (soDien - 50) \* 1200;

System.out.println("soDien can tinh la " + tien);

}

}

}

1. **Tạo menu**

package TaoMenu;

import java.util.Scanner;

public class Bai4 {

public static void menu() {

Scanner scn = new Scanner(System.in);

System.out.println("Chon chuc nang ");

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

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

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

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

int chon = Integer.parseInt(scn.nextLine());

switch (chon) {

case 1:

ptb1.giaiPTB1();

menu();

case 2:

ptb2.giaiPTB2();

menu();

case 3:

tinhtiendien.tTD();

menu();

case 4:

System.exit(0);

default:

System.out.println("Méo chạy ");

}

}

public static void main(String[] args) {

menu();

}

}

**Bài tập ngoài**

1. **Số chính phương**

package So\_Chin\_Phuong;

import java.util.Scanner;

public class So\_Chin\_Phuong {

public static void main(String[] args) {

float a, can\_a;

Scanner scanner = new Scanner(System.in);

System.out.println("Nhap vao so a: ");

a = scanner.nextFloat();

can\_a = (float) Math.sqrt(a);

System.out.println("gia tri can la" + can\_a);

if (can\_a \* can\_a == a) {

System.out.println("la so chin phuong");

} else {

System.out.println("khong la so chin phuong");

}

}

}

1. **Tính điểm xếp loại**

package javaapplication285;

import java.util.Scanner;

public class XepLoaiHocSinh {

public static void main(String[] args) {

float a;

Scanner scn = new Scanner(System.in);

System.out.println("Nhap vao gia tri a: ");

a = scn.nextFloat();

if (a < 5) {

System.out.println("kem");

} else if (a > 5 && a < 7) {

System.out.println("trung binh");

} else if (a > 7 && a < 8) {

System.out.println("kha");

} else {

System.out.println("gioi");

}

}

}

1. **Tính giai thừa bằng while**

package javaapplication285;

import java.util.Scanner;

public class giaithuawhile {

public static void main(String[] args) {

Scanner scn = new Scanner(System.in);

int a, i = 1, giai\_thua = 1;

System.out.println("Nhap vao so a: ");

a = scn.nextInt();

while (i <= a) {

giai\_thua = giai\_thua \* i;

i++;

}

System.out.println("gia tri giai thua la " + giai\_thua);

}

}

**Tính giai thừa bằng do while**

package javaapplication285;

import java.util.Scanner;

public class giaithua {

public static void main(String[] args) {

Scanner scn = new Scanner(System.in);

int a, i = 1, giai\_thua = 1;

System.out.println("Nhap vao so a: ");

a = scn.nextInt();

do {

giai\_thua = giai\_thua \* i;

i++;

} while (i <= a);

System.out.println("gia tri giai thua la " + giai\_thua);

}

}

1. **Xóa phần tử x**

package javaapplication285;

import java.util.Arrays;

import java.util.Scanner;

public class xoa\_X\_tu\_ban\_phim {

public static void main(String[] args) {

Scanner scn = new Scanner(System.in);

int a, x, i, c;

do {

System.out.println("Nhap so nguyen a tu ban phim: ");

a = scn.nextInt();

} while (a <= 0);

int A[] = new int[a];

System.out.println("Nhap phan tu cho mang sau: ");

for (i = 0; i < a; i++) {

System.out.println("Nhap phan tu " + i + "la");

A[i] = scn.nextInt();

}

System.out.println("Nhap phan tu can xoa la n");

x = scn.nextInt();

for (c = i = 0; i < a; i++) {

if (A[i] != x);

A[c] = A[i];

c++;

}

a = c;

Arrays.sort(A);

System.out.println("Phan tu sau khi xoa la: ");

for (i = 0; i < a; i++) {

System.out.println(A[i] + "\t");

}

}

}

1. **Ma trận đối xứng**

package javaapplication285;

import java.util.Scanner;

public class matran {

public static void main(String[] args) {

Scanner scn = new Scanner(System.in);

// Nhập số đỉnh của đồ thị

System.out.print("Nhap so dinh cua do thi: ");

int n = scn.nextInt();

int[][] matrix = new int[n][n];

System.out.println("Nhap gia trị trong so cua canh: ");

for (int i = 0; i < n; i++) {

for (int j = i; j < n; j++) {

if (i == j) {

continue;

}

System.out.print("Nhap trong so cho canh (" + i + ", " + j + "): ");

int weight = scn.nextInt();

matrix[i][j] = weight;

matrix[j][i] = weight;

}

}

System.out.println("Ma tran doi xung:");

for (int i = 0; i < n; i++) {

for (int j = 0; j < n; j++) {

System.out.print(matrix[i][j] + " ");

}

System.out.println();

}

}

}