**Câu 1: Viết phương trình bậc nhất**

**package** hannguthe;

**import** java.util.Scanner;

**public** **class** giaiphuongtrinh1 {

**public** **static** **void** main(String[] args) {

**int** a,b, x;

Scanner scanner = **new** Scanner(System.***in***);

System.***out***.println("nhap so a");

a= scanner.nextInt();

System.***out***.println("nhap so b");

b= scanner.nextInt();

**if** (a==0){

**if** (b==0){

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

}

**else** {

System.***out***.println("phuong trinh vo nghiem");

}

}

**else** {

x=-b/a;

System.***out***.println("phuong trinh co nghiem:"+x);

}

}

}

**Câu 2: Viết phương trình bậc hai**

**package** hannguthe;

**import** java.util.Scanner;

**public** **class** giaiphuongtrinh2 {

**public** **static** **void** main(String[] args)

{

**double** a,b,c,x1,x2,delta;

Scanner scanner = **new** Scanner(System.***in***);

System.***out***.println("nhap a:");

a= scanner.nextInt();

System.***out***.println("nhap b");

b= scanner.nextInt();

System.***out***.println("nhap c");

c= scanner.nextInt();

**if** (a==0){

x1=x2= -b/c;

}**else**{

delta = Math.*pow*(b, 2) -4\*a\*c;

**if** (delta <0){

System.***out***.println("phuong trinh vo nghiem");

}**else** **if** (delta ==0){

x1= -b/(2\*a);

System.***out***.println("phuong trinh co nghiem kep:"+x1);

}**else** {

x1= (-b+Math.*sqrt*(delta)) / (2\*a);

x2= (-b-Math.*sqrt*(delta)) / (2\*a);

System.***out***.println("phuong trinh có 2 nghiem:");

System.***out***.println("nghiem 1:"+x1);

System.***out***.println("nghiem 2:"+x2);

}

}

}

}

**Câu 3: Tính tiền điện**

**package** hannguthe;

**import** java.util.Scanner;

**public** **class** tinhtiendien {

**public** **static** **void** main(String[] args) {

**float** Sodien;

**float** tiendien;

Scanner scanner = **new** Scanner(System.***in***);

System.***out***.println("Nhap Sodien");

Sodien = scanner.nextInt();

**if**(Sodien<50)

{

tiendien=Sodien\*1000;

}

**else** {

tiendien=50\*1000+(Sodien-50)\*1200;

}

System.***out***.println("so tien dien la:" +tiendien);

}

}

**Câu 4: Viết chương trình tổ chức menu của 3 bài trên và 1 chức năng thoát ứng dụng**

**package** hannguthe;

**import** java.util.Scanner;

**public** **class** baicuoi {

**public** **static** **void** menu() {

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

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

System.***out***.println("3. tinh tien dien");

System.***out***.println("4. out");

System.***out***.print("xin moi chon");

Scanner scanner = **new** Scanner(System.***in***);

**int** lua= scanner.nextInt();

**switch**(lua) {

**case** 1:

giaiphuongtrinh1.*main*(**null**);

**break**;

**case** 2:

giaiphuongtrinh2.*main*(**null**);

**case** 3:

tinhtiendien.*main*(**null**);

**break**;

**default**:

System.***out***.println("nhap sai");

}

}

**public** **static** **void** main (String[] args) {

*menu*();

}

}

**Câu 5: Kiểm ra số chính phương**

**package** hanngoo;

**import** java.util.Scanner;

**public** **class** ngua {

**public** **static** **void** main(String[] args) {

Scanner scanner = **new** Scanner(System.***in***);

**int** n = scanner.nextInt();

**if** (*check*(n)== **true** ){

System.***out***.println(" day la so chinh phuong");

}

**else**

{

System.***out***.println("day ko phai la so chinh phuong");

}

}

**private** **static** **boolean** check(**int** n ){

**int** k = (**int**)Math.*sqrt*(n);

**return** k\*k == n;

}

}

**Câu 6: Xếp loại học sinh**

**package** demo;

**import** java.text.DecimalFormat;

**import** java.util.Scanner;;

**public** **class** xephang {

**public** **static** **void**(String[] args) {

double diemKiemtraHS1, diemKiemTraHS2, diemThi, diemTrungBinh;

String ketQuaXepLoai=null;

Scanner scanner = **new** Scanner(System.in);

DecimalFormat decimalFormat = **new** DecimalFormat("#.#");

System.***out***.println("Nhap vao diem kiem tra he so 1:");

diemKiemtraHS1 = scanner.nextDouble();

System.***out***.println("Nhap vao điem kiem tra he so 2: ");

diemKiemTraHS2 = scanner.nextDouble();

System.***out***.println("Nhap vao diem thi cuoi ky: ");

diemThi = scanner.nextDouble();

**if**((diemKiemtraHS1 < 0 || diemKiemtraHS1 > 10) || (diemKiemTraHS2 < 0 || diemKiemTraHS2 > 10) || (diemThi < 0 || diemThi > 10)) {

System.***out***.println("Nhap diem khong hop le");

} **else**{

diemTrungBinh = ((diemKiemtraHS1 + diemKiemTraHS2 \* 2.0) + (diemThi \* 3.0 ))/6;

decimalFormat.format(diemTrungBinh);

**if**(diemTrungBinh > 8.0) {

ketQuaXepLoai = "Loai gioi";

} **elseif**((diemTrungBinh <= 8.0) && (diemTrungBinh < 8.0)) {

ketQuaXepLoai = "Loai kha";

} **elseif**((diemTrungBinh < 7.0) && (diemTrungBinh < 7.0)) {

ketQuaXepLoai = "Loai TB";

} **else** **if**(diemTrungBinh < 5.0) {

ketQuaXepLoai = "Loai kem";

}

System.***out***.println ("ket qua xep loai hs la:" +ketQuaXepLoai) ;

}

}

}

**Câu 7: Tính giai thừa số nguyên**

**package** demo;

**import** java.util.Scanner;

**public** **class** phuongtrinh {

**public** **static** **void** main(String[] args) {

**int** n,i;

Scanner scanner = **new** Scanner(System.***in***);

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

n = scanner.nextInt();

i=1;

**int** fact = 1;

**do**{

fact=fact \* i;

i++;

}**while**(i<=n);

System.***out***.println ("Giai thua cua n la: " + fact);

}

}

**Câu 8: Xóa phần tử có giá trị x nếu có**

**package** hanngoo;

**import** java.util.Scanner;

**public** **class** baitap {

**public** **static** **void** main(String[] args) {

**int** n, i, c, count;

Scanner scanner = **new** Scanner(System.***in***);

**do** {

System.***out***.println("Nhap vao sa phan tu cua mang: ");

n = scanner.nextInt();

} **while** (n <= 0);

**int** A[] = **new** **int**[n];

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

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

System.***out***.print("Nhap phan tu thu " + i + ": ");

A[i] = scanner.nextInt();

}

System.***out***.println("Nhap so nguyen x: ");

**int** x = scanner.nextInt();

**for** (c = i = 0; i < n; i++) {

**if** (A[i] != x) {

A[c] = A[i];

c++;

}

}

n = c;

System.***out***.println("Mang con lai sau khi xoa phan tu " + x + " la: ");

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

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

}

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

**for**(**int** j=0; j<i;j++) {

**if**(A[i]<A[j]) {

count=A[i];

A[i]=A[j];

A[j]=count;

}

}

}

System.***out***.println("\nMang sau khi sap xep tang dan la:" );

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

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

}

}

}