//1.FIND THE MINIMUM AND MAXIMUM ELEMENT IN AN ARRAY?

ANS:-import java.util.\*;

class ArrayHomeWork

{

public static void main(String[] args)

{

int[] a={100,70,60,40,50};

Arrays.sort(a);

System.out.println("Minimum="+a[0]);

System.out.println("maximum="+a[a.length-1]);

}

}

---------------------------------------------------------------------------------

//2.WRITE A PROGRAM TO REVERSE THE ARRAY?

ANS:-

import java.util.\*;

class ArrayHomeWork

{

public static void main(String[] args)

{

int[] a={10,70,30,40,50};

for(int i=a.length-1;i>=0;i--)

{

System.out.println(a[i]);

}

}

}

--------------------------------------------------------------------------------

//3.WRITE A PROGRAM TO SORT THE GIVEN ARRAY?

ANS:-

import java.util.\*;

class ArrayHomeWork

{

public static void main(String[] args)

{

int[] a={70,200,30,40,50};

Arrays.sort(a);

for(int i=0;i<a.length;i++)

System.out.println(a[i]);

}

}

-----------------------------------------------------------------------------

//4.FIND THE OUCCURENCE OF AN INTEGER IN THE ARRAY?[5,8,5,7,4,5]

ANS:-

import java.util.\*;

class ArrayHomeWork

{

public static void main(String[] args)

{

int[] a={5,8,5,7,4,5};

int[]b=new int[a.length];

int visited=-1;

for(int i=0;i<a.length;i++)

{int count=1;

for(int j=i+1;j<a.length;j++)

{

if(a[i]==a[j])

{

count++;

b[j]=visited;

}

}

if(b[i]!=visited)

b[i]=count;

}

for(int i=0;i<b.length;i++)

{

if(b[i]!=visited)

System.out.println(" "+a[i]+" "+b[i]);

}

}

}

--------------------------------------------------------------------------------

//5.MOVE ALL NEGATIVE ELEMENTS TO ONE SIDE OF THE ARRAY?[-1,6,8,7,-4,-3];

ANS:-

import java.util.\*;

import java.io.\*;

class ArrayHomeWork

{

static void rearrange(int arr3[],int n)

{

int j=0,temp;

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

{

if(arr3[i]<0)

{

if(i!=j)

{

temp=arr3[i];

arr3[i]=arr3[j];

arr3[j]=temp;

}

j++;

}

}

}

static void printArray(int arr3[],int n)

{

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

{

System.out.print(" "+arr3[i]);

}

}

public static void main(String[] args)

{

//int[] arr={2,3,4-1,-2,3,-4};

int[] arr1={2,-3,4,3,-5};

int[] arr2={6,-7,8,-9,};

int a1=arr1.length;

int b2=arr2.length;

int c1=a1+b2;

int [] arr3=new int[c1];

System.arraycopy(arr1,0,arr3,0,a1);

System.arraycopy(arr2,0,arr3,a1,b2);

System.out.println(Arrays.toString(arr3));

int n =arr3.length;

rearrange(arr3,n);

printArray(arr3,n);

}

}

-----------------------------------------------------------------

//6.FIND DUPLICATES IN ARRAY?

ANS-

import java.util.\*;

import java.io.\*;

class ArrayHomeWork

{

public static void main(String[] args)

{

int[] arr={2,3,2,4,5,3};

for(int i=0;i<arr.length;i++)

{

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

}

System.out.println("\n");

for(int i=0;i<arr.length-1;i++)

{

for(int j=i+1;j<arr.length;j++)

{

if(arr[i]==arr[j])

{

System.out.println("DUPLICATE:"+arr[j]);

}

}

}

}

}

---------------------------------------------------------------------------------------

//7.FIND THE FACTORIAL OF A LARGE NUMBER?

ANS:-

import java.util.\*;

import java.io.\*;

import java.lang.\*;

import java.math.\*;

class ArrayHomeWork

{

public static void main(String[] args) throws java.lang.Exception

{

BigInteger fact=BigInteger.ONE;

//int f=1;

int factorialNo=100;

for(int i=2;i<=factorialNo;i++)

{

fact=fact.multiply(new BigInteger(String.valueOf(i)));

//f=f\*i;

}

System.out.println("THE FACTORIAL OF "+factorialNo+"is:"+fact);

}

}

------------------------------------------------------------------------------------------------

//8.HOW TO FIND COOMON ELEMENTS IN THREE SORTED ARRAY?

ANS:-

import java.util.\*;

import java.io.\*;

import java.lang.\*;

import java.math.\*;

class ArrayHomeWork

{

void findCommon(int ar1[],int ar2[],int ar3[])

{

int i=0,j=0,k=0;

while(i<ar1.length && j<ar2.length && k<ar3.length)

{

if(ar1[i]==ar2[j] && ar2[j]==ar3[k])

{

System.out.println("COMMON ELEMENTS"+" "+ar1[i]+" ");

i++;

j++;

k++;

}

else if(ar1[i]<ar2[j])

i++;

else if(ar2[j]<ar3[k])

j++;

else

k++;

}

}

public static void main(String[] args)

{

ArrayHomeWork ob=new ArrayHomeWork();

int ar1[]={1,5,10,40,80};

int ar2[]={6,7,20,80,100};

int ar3[]={3,4,15,20,70,80};

ob.findCommon(ar1,ar2,ar3);

}

}

------------------------------------------------------------------------------------

//9.HOW TO REARRANGE ARRAY IN ALTERNATING POSITVE AND NEGATIVE NUMBERS?

ANS:-

import java.util.\*;

import java.io.\*;

class ArrayHomeWork

{

static void rearrange(int arr[],int n)

{

int i=-1,temp=0;

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

{

if(arr[j]<0)

{

i++;

temp=arr[i];

arr[i]=arr[j];

arr[j]=temp;

}

}

int pos=i+1,neg=0;

while(pos<n && neg<pos && arr[neg]<0)

{

temp=arr[neg];

arr[neg]=arr[pos];

arr[pos]=temp;

pos++;

neg+=2;

}

}

static void printArray(int arr[],int n)

{

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

{

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

}

}

public static void main(String[] args)

{

int[] arr={5,3,4-1,-2,3,-4};

int n =arr.length;

rearrange(arr,n);

printArray(arr,n);

}

}

-------------------------------------------------------------------------------

//10.WRITE A PROGRAM TO FIND THE SUM AND PRODUCT OF ALL ELEMENTS OF AN ARRAY?

ANS:-

import java.util.\*;

import java.io.\*;

class ArrayHomeWork

{

public static void main(String[] args)

{

int[] arr={1,2,3,4,3,5};

int sum=0,product=1;

for(int j=0;j<arr.length;j++)

{

sum=sum+arr[j];

product=product\*arr[j];

}

System.out.println("SUM OF ALL THE ELEMENT OF AN ARRAY:"+sum);

System.out.println("PRODUCT OF ALL THE ELEMENT OF AN ARRAY:"+product);

}

}

-----------------------------------------------------------------------------------