1.

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

String str=scan.nextLine();

String rev\_str = "";

System.***out***.println("Length of the string = "+str.length());

System.***out***.println(str.toUpperCase());

**for**(**int** i=str.length()-1;i>=0;i--) {

rev\_str=rev\_str+str.charAt(i);

}

System.***out***.println(rev\_str);

**if**(str.equals(rev\_str)) {

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

}**else** {

System.***out***.println("not palindrome");

}

}

}

2.

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.println("enter first number: ");

**int** num1=scan.nextInt();

System.***out***.println("enter second number: ");

**int** num2=scan.nextInt();

**int** flag1 = 0,flag2=0;

**int** numbers[]= {5,6,25,35,39};

**for**(**int** i=0;i<numbers.length;i++) {

**if**(num1==numbers[i]) {

flag1=1;

}**if**(num2==numbers[i]) {

flag2=1;

}

}

**if**(flag1==1 && flag2==1) {

System.***out***.println("Its Bingo!");

}**else** {

System.***out***.println("Not Found!");

}

}

}

3.

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

**int** A[]= {3,2,4,5,6,4,5,7,3,2,3,4,7,1,2,0,0,0};

**int** sum=0,avg=0,small=A[0];

**for**(**int** i=0;i<15;i++) {

sum=sum+A[i];

avg=sum/15;

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

small=A[i];

}

}

A[15]=sum;

A[16]=avg;

A[17]=small;

**for**(**int** i=0;i<A.length;i++) {

System.***out***.println(A[i]);

}

}

}

4.

5.

**public** **interface** MedicineInfo {

**public** **abstract** **void** displayLabel();

}

**public** **class** Tablet **implements** MedicineInfo {

@Override

**public** **void** displayLabel() {

// **TODO** Auto-generated method stub

System.***out***.println("store in a cool dry place---tablet");

}

}

**public** **class** Syrup **implements** MedicineInfo{

@Override

**public** **void** displayLabel() {

// **TODO** Auto-generated method stub

System.***out***.println("store in the fridges--syrup");

}

}

**public** **class** Ointment **implements** MedicineInfo {

@Override

**public** **void** displayLabel() {

// **TODO** Auto-generated method stub

System.***out***.println("for external use only");

}

}

**import** java.util.Random;

**public** **class** TestMedicine {

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

// **TODO** Auto-generated method stub

**int**[] medicine=**new** **int**[10];

Random random=**new** Random();

**int** ran=random.nextInt(3);

**if**((ran+1)==1) {

Tablet t=**new** Tablet();

t.displayLabel();

}**else** **if**((ran+1)==2) {

Syrup s=**new** Syrup();

s.displayLabel();

}**else** **if**(ran+1==3) {

Ointment o=**new** Ointment();

o.displayLabel();

}

}

}

6.

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.println("enter size of an array");

**int** size=scan.nextInt();

**int** nums[]=**new** **int**[size];

System.***out***.println("enter the array values: ");

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

{

nums[i]=scan.nextInt();

}

**for**(**int** i=0;i<nums.length;i++) {

**int** temp=0;

**for**(**int** j=i+1;j<nums.length;j++) {

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

temp=nums[i];

nums[i]=nums[j];

nums[j]=temp;

}

}

}

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

{

System.***out***.println(nums[i]);

}

}

}

7.

**import** java.util.Arrays;

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.print("Enter the size of an array: ");

**int** size = sc.nextInt();

**int**[] array = **new** **int**[size];

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

System.***out***.print("Enter the element: ");

array[i] = sc.nextInt();

}

Arrays.*sort*(array);

**for**(**int** i=0; i<array.length; i++) {

**for**(**int** j=i+1; j<array.length; j++) {

**if**(array[i] == array[j]) {

i++;

}

}

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

}

sc.close();

}

}

8.

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.println("enter size of an array");

**int** size=scan.nextInt();

**int** temp=0;

String array3[] = **new** String[size];

String[] array1=**new** String[size];

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

array1[i]=scan.next();

}

System.***out***.println("enter size of an array 2");

**int** size1=scan.nextInt();

String[] array2=**new** String[size1];

**for**(**int** i=0;i<size1;i++) {

array2[i]=scan.next();

}

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

**for**(**int** j=0;j<size1;j++) {

**if**(array1[i].equals(array2[j])) {

array3[temp]=array1[i];

temp++;

}

}

}

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

System.***out***.println(array3[i]);

}

}

}

9.

**import** java.util.Arrays;

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.print("Enter the number of rows: ");

**int** rows = sc.nextInt();

System.***out***.print("Enter the number of columns: ");

**int** columns = sc.nextInt();

**int**[][] array = **new** **int**[rows][columns];

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

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

System.***out***.print("Enter the element: ");

array[i][j] = sc.nextInt();

}

}

System.***out***.print("Enter the column number to sort: ");

**int** k = sc.nextInt();

**int**[] arr = **new** **int**[rows];

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

**int** min = array[i][k-1];

**for**(**int** j=i+1; j<array.length; j++) {

**if**(min > array[j][k-1]) {

arr = array[j];

array[j] = array[i];

array[i] = arr;

}

}

}

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

**for**(**int** j=0; j<array[i].length; j++) {

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

}

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

}

sc.close();

}

}

10.

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.println("enter the row size");

**int** row=sc.nextInt();

System.***out***.println("enter the column size");

**int** col=sc.nextInt();

**int**[][] arr=**new** **int**[row][col];

System.***out***.println("enter the array values");

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

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

arr[i][j]=sc.nextInt();

}

}

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

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

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

}

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

}

}

}

11.

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.println("enter the row size");

**int** row=sc.nextInt();

System.***out***.println("enter the column size");

**int** col=sc.nextInt();

**int**[][] arr=**new** **int**[row][col];

System.***out***.println("enter the array values");

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

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

arr[i][j]=sc.nextInt();

}

}

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

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

**if**(i==0 || j==0|| i==row-1||j==col-1)

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

**else**

System.***out***.print(" ");

}

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

}

}

}

12.

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.println("enter the row size");

**int** row=sc.nextInt();

System.***out***.println("enter the column size");

**int** col=sc.nextInt();

**int** sum=0,sum\_2=0;

**int**[][] arr=**new** **int**[row][col];

System.***out***.println("enter the array values");

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

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

arr[i][j]=sc.nextInt();

}

}

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

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

**if**(i==j) {

sum=sum+arr[i][j];

}

}

sum\_2=sum\_2+arr[i][col-1-i];

}

System.***out***.println("primary diagnol: "+sum);

System.***out***.println("secondary diagonal: "+sum\_2);

}

}

13.

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.println("enter the string");

String str1 = sc.next();

String str=str1.toUpperCase();

System.***out***.println("enter the no of vowels from last");

**int** no=sc.nextInt();

**int** count=0;

**for**(**int** i=0;i<str.length();i++) {

**if**(str.charAt(i)=='A'||str.charAt(i)=='E'||str.charAt(i)=='I'||str.charAt(i)=='O'||str.charAt(i)=='U'){

count+=1;

}

}

**if**(no>count) {

System.***out***.println("mismatch in vowel count");

}**else** {

**for**(**int** i=str.length()-1;i>=0;i--) {

**if**(str.charAt(i)=='A'||str.charAt(i)=='E'||str.charAt(i)=='I'||str.charAt(i)=='O'||str.charAt(i)=='U'){

//System.out.println(str.charAt(i));

**if**(no<=count) {

System.***out***.println(str.charAt(i));

no--;

}

}

}

}

}

}

14.

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.println("enter the string");

String str1 = sc.next();

String str2="";

**for**(**int** i=str1.length()-1;i>=0;i--) {

str2=str2+str1.charAt(i);

}

System.***out***.println(str2);

}

}

15.

**import** java.util.Scanner;

**import** java.util.regex.Matcher;

**import** java.util.regex.Pattern;

**import** java.util.Arrays;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.println("enter the string");

String st=sc.next();

**char** ch[]=st.toCharArray();

Arrays.*sort*(ch);

String s=**new** String(ch);

System.***out***.println(ch);

}

}

16.

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.println("enter the string");

String str = sc.next();

**char** temp;

**char** ch[]=str.toCharArray();

**if**(ch.length%2==0) {

**for**(**int** i=0;i<ch.length;i+=2) {

temp=ch[i];

ch[i]=ch[i+1];

ch[i+1]=temp;

}}**else** {

**for**(**int** i=0;i<ch.length-1;i+=2) {

temp=ch[i];

ch[i]=ch[i+1];

ch[i+1]=temp;

}

}

String sr=**new** String(ch);

System.***out***.println(sr);

}

}

17.

**import** java.util.Scanner;

**import** java.util.regex.Matcher;

**import** java.util.regex.Pattern;

**import** java.util.Arrays;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.println("enter the string");

String st=sc.next();

**int** flag=0;

**for**(**char** i='a';i<='z';i++) {

**if**(!st.contains(String.*valueOf*(i))) {

flag=1;

**break**;

}

}

**if**(flag==1) {

System.***out***.println("no");

}**else** {

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

}

}

}

18.

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.println("enter the string");

String str1 = sc.nextLine();

String str2="";

String arr[]=str1.split(" ");

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

str2+=arr[i].charAt(0);

}

System.***out***.println(str2.toUpperCase());

}

}

19.

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.println("enter the string");

String str1 = sc.nextLine();

System.***out***.println("enter the string to inserrt");

String str2 = sc.nextLine();

System.***out***.println("enter the index");

**int** index=sc.nextInt();

String str3=str1.substring(0, index+1)+str2+str1.substring(index, str1.length());

System.***out***.println(str3);

}

}

20.

**import** java.util.Scanner;

**public** **class** Day3Assignment {

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

// **TODO** Auto-generated method stub

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

System.***out***.println("enter the string");

String str1 = sc.nextLine();

String[] str=str1.split(" ");

**for**(**int** i=0;i<str.length;i++) {

**if**(str[i].length()%2==0) {

System.***out***.println(str[i]);

}

}

}

}