**WEEK1:-**

**DAY-1:-**

**////Write a Program that accepts two Strings as command line arguments and generate the output in the required format.**

**Example1)**

**If the two command line arguments are Wipro and Bangalore then the output generated should be Wipro Technologies Bangalore.**

**Example2)**

**If the command line arguments are ABC and Mumbai then the output generated should be ABC Technologies Mumbai**

**[Note: It is mandatory to pass two arguments in command line]**

Program:-

public class wipro {

public static void main(String[] args) {

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

System.***out***.println(args[0]+" "+"Technologies"+" "+args[1]);

}

}

**////Write a Program to accept a String as a command line argument and print a Welcome message as given below.**

**Command Line Arguments**

**Example1)**

**C:\> java Sample John**

**O/P Expected Welcome John**

Program:-

public class wipro {

public static void main(String[] args) {

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

System.***out***.println("welcome"+" "+args[0]);

}

}

**///Write a Program to accept two integers as command line arguments and print the sum of the two numbers**

**Example1)**

**C:\>java Sample 10 20**

**O/P Expected The sum of 10 and 20 is 30**

Program:-

public class wipro {

public static void main(String[] args) {

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

int l1=Integer.*parseInt*(args[0]);

int l2=Integer.*parseInt*(args[1]);

System.***out***.println(l1+l2);

}

}

**DAY-2:-**

**////A)write a program to check if a given integer number is Positive, Negative, or Zero.**

**B) Given two non-negative int values, print true if they have the same last digit, such as with 27 and 57.**

**lastDigit(7, 17) true**

**lastDigit(6, 17) false**

**lastDigit(3, 113) true**

Program:-A)

package even;

public class wipro {

public static void main(String[] args) {

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

int n=Integer.*parseInt*(args[0]);

if(n>0) {

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

}

else if(n==0) {

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

}

else {

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

}

}

}

B)

public class wipro {

public static void main(String[] args) {

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

int n=Integer.*parseInt*(args[0]);

int n1=Integer.*parseInt*(args[1]);

if(n%10==n1%10) {

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

}

else {

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

}

}

}

**////Write a program to check if a given integer number is odd or even.**

Program:-

package even;

public class wipro {

public static void main(String[] args) {

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

int n=Integer.*parseInt*(args[0]);

if(n%2==0) {

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

}

else {

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

}

}

}

**////write a program to check if the program has received command line arguments o not.**

**If the program has not received arguments then print "No Values", else print all the values in a single line separated by (comma)**

**Examplel) java Example O/P: No values**

**Example2) java Example Mumbai Bangalore**

**O/P: Mumbai, Bangalore**

**[Hint: You can use length property of an array to check its length]**

Program:-

package even;

public class wipro {

public static void main(String[] args) {

// TODO Auto-generated method stub

if(args.length==0)

{

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

}

else{

System.*out*.println(args[0]+","+args[1]);

}

}

}

**////initialize two character variables in a program and display the characters in alphabetical order.**

**Examplel) if the first character is 's' and second character is 'e' then the output should be e,s**

**Example2) if the first character is 'a' and second character is 'e', then the output should be a,e**

Program:-

package even;

public class wipro {

public static void main(String[] args) {

// TODO Auto-generated method stub

char s1='s';

char s2='e';

if(s1>s2) {

System.*out*.println(s2+","+s1);

}

else {

System.*out*.println(s1+","+s2);

}

}

}

**////Initialize a character variable in a program and**

**print 'Alphabhet' if the initialized value is an alphabhet,**

**print 'Digit' if the initialized value is a number, and print 'Special Character', if the initialized value is anything else.**

Program:-

package even;

public class wipro {

public static void main(String[] args) {

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

char s1='a';

if( s1<=65 && s1<=90 ||s1>=97&& s1<=122 ) {

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

}

else if(s1>=0&& s1<=9){

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

}

else {

System.***out***.println("special characters");

}

}

}

**////Write a program to accept gender ("Male" or "Female") and age from command line arguments and print the percentage of interest based on the given conditions.**

**If the gender is 'Female' and age is between 1 and 58, the percentage of interest is 8.2%.**

**If the gender is 'Female' and age is between 59 and 100, the percentage of interest is 9.2%.**

**If the gender is 'Male' and age is between 1 and 58, the percentage of interest is 8.4%.**

**If the gender is 'Male' and age is between 59 and 100, the percentage of interest is 10.5%.**

Program:-

package even;

public class wipro {

public static void main(String[] args) {

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

String n="m";

int n1=Integer.*parseInt*(args[0]);

switch(n) {

case "f":

if(n1>=1&&n1<=58) {

System.***out***.println("female percentage is 8.2%");

break;

}

else if(n1>=59 &&n1<=100) {

System.***out***.println("female percentage is 9.2%");

break;

}

case "m":

if(n1>=1&&n1<=58) {

System.***out***.println("male percentage is 8.4%");

break;

}

else if(n1>=59&&n1<=100) {

System.***out***.println("male percentage is 10.5%");

break;

}

else {

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

break;

}

}

}

}

**////Initialize a character variable with an alphabhet in a program.**

**If the character value is in lowercase, the output should be displayed in uppercase in the following format.**

**Example1)**

**i/p:a**

**o/p:a->A**

**If the character value is in uppercase, the output should be displayed in lowercase in the following format.**

**Example2)**

**1/p:A**

**o/p:A->a**

Program:-

package even;

public class wipro {

public static void main(String[] args) {

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

char n1='c';

System.***out***.println(Character.*toUpperCase*(n1));

System.***out***.println(Character.*toLowerCase*(n1));

}

}

**////Write a program to receive a color code from the user (an Alphabhet).**

**The program should then print the color name, based on the color code given.**

**The following are the color codes and their corresponding color names. R->Red, B->Blue, G->Green, O->Orange, Y->Yellow, W->White.**

**If color code provided by the user is not valid then print "Invalid Code".**

Program:-

package even;

public class wipro {

public static void main(String[] args) {

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

char n1='G';

switch(n1) {

case 'R':

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

break;

case 'B':

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

break;

case 'G':

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

break;

case 'O':

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

break;

case 'Y':

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

break;

case 'W':

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

break;

default:

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

break;

}

}

}

**////Write a program to receive a number and print the corresponding month names**

**Example1)**

**C:\>java Sample 12**

**O/P Expected: December**

**Example2)**

**C:\>java Sample**

**O/P Expected: Please enter the month in numbers**

**Example3)**

**C:\>java Sample 15**

**O/P Expected Invalid month**

Program:-

package even;

public class wipro {

public static void main(String[] args) {

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

int n1=15;

switch(n1) {

case 1:

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

break;

case 2:

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

break;

case 3:

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

break;

case 4:

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

break;

case 5:

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

break;

case 6:

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

break;

case 7:

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

break;

case 8:

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

break;

case 9:

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

break;

case 10:

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

break;

case 11:

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

break;

case 12:

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

break;

default:

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

break;

}

}

}

**////Write a program to print numbers from 1 to 10 in a single row with one tab space**

Program:-

package even;

public class wipro {

public static void main(String[] args) {

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

int n1=Integer.*parseInt*(args[0]);

for(int i=0;i<=n1;i++) {

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

}

}

}

**////Write a program to print even numbers between 23 and 57. Each number should be printed in a separate row.**

Program:-

package even;

public class wipro {

public static void main(String[] args) {

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

for(int i=23;i<=57;i++) {

if(i%2==0) {

System.***out***.println(i+" ");

}

}

}

}

**////Write a program to check if a given number is prime or not.**

Program:-

package even;

public class wipro {

public static void main(String[] args) {

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

int num=Integer.*parseInt*(args[0]);

int count=0,i=2;

while(i<num)

{

if(num%i == 0)

{

count++;

break;

}

i++;

}

if(count==0)

{

System.***out***.println("\n"+num+" is a prime number");

}else {

System.***out***.println("\n"+num+" is not a prime number");

}

}

}

**////Write a program to print prime numbers between 10 and 99.**

Program:-

package even;

import java.util.\*;

public class rev {

public static void main(String[] args) {

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

int s1, s2, s3, flag = 0, i, j;

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

System.***out***.println ("Enter the lower limit :");

s1 = s.nextInt();

System.***out***.println ("Enter the upper limit :");

s2 = s.nextInt();

System.***out***.println ("The prime numbers in between the entered limits are :");

for(i = s1; i <= s2; i++)

{

for( j = 2; j < i; j++)

{

if(i % j == 0)

{

flag = 0;

break;

}

else

{

flag = 1;

}

}

if(flag == 1)

{

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

}

}

}

}

**////Write a program to print the sum of all the digits of a given number.**

**Example1)**

**I/P:1234**

**For**

**O/P:10**

Program:-

package even;

public class wipro {

public static void main(String[] args) {

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

int n1=Integer.*parseInt*(args[0]);

int dig=0;

while(n1>0) {

int rem=n1%10;

dig=dig+rem;

n1/=10;

}

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

}

}

**////Write a program to print in Floyds format (using for and while loop)**

**Example1)**

**C:\>java Sample**

**O/P: Please enter an integer number**

**Example2)**

**C:\>java Sample**

**O/P**

**\***

**\*\***

**\*\*\***

Program:-

package even;

public class array {

public static void main(String[] args) {

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

for(int i=1;i<=5;i++) {

for(int j=1;j<=i;j++) {

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

}

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

}

}

}

**////Write a program to reverse a given number and print**

**Example1)**

**I/P: 1234**

**O/P:4321**

**Example2)**

**I/P:1004**

**O/P:4001**

Program:-

package even;

public class rev {

public static void main(String[] args) {

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

int n1=Integer.*parseInt*(args[0]);

int dig=0;

while(n1>0) {

int rem=n1%10;

dig=dig\*10+rem;

n1/=10;

}

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

}

}

**////Write a Java program to find if the given number is palindrome or not**

**Example1)**

**C:\>java Sample 110011**

**O/P: 110011 is a palindrome**

**Example2)**

**C:\>java Sample 1234**

**O/P: 1234 is not a palindrome**

Program:-

package even;

public class rev {

public static void main(String[] args) {

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

int n1=Integer.*parseInt*(args[0]);

int dig=0,temp=n1;

while(n1>0) {

int rem=n1%10;

dig=dig\*10+rem;

n1/=10;

}

if(temp==dig) {

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

}

else {

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

}

}

}

**DAY-3**

////Write a program to initialize an integer array and print the sum and average of the array.

**Program:**

import java.util.\*;

public class two {

public static void main(String[] args) {

// TODO Auto-generated method stub

int sum=0;

double avg=0.0;

int arr1[]=new int[3];

Scanner inp = new Scanner(System.in);

for(int i=0;i<3;i++) {

arr1[i]=inp.nextInt();

}

for(int i=0;i<3;i++) {

System.out.print(arr1[i]+" ");

sum+=arr1[i];

avg=sum/arr1.length;

}

System.out.println();

System.out.println("sum:"+sum+","+"avg:"+avg);

}

}

////Write a program to initialize an integer array and find the maximum and minimum value of the array.

**Program:**

import java.util.\*;

public class two {

public static void main(String[] args) {

// TODO Auto-generated method stub

int sum=0;

int avg=0;

int arr1[]=new int[3];

Scanner inp= new Scanner(System.in);

for(int i=0;i<3;i++) {

arr1[i]=inp.nextInt();

}

for(int i=0;i<3;i++) {

System.out.print(arr1[i]+" ");

}

Arrays.sort(arr1);

System.out.println("min:"+arr1[0]+","+"max:"+arr1[arr1.length-1]);

}

}

////Write a program to initialize an integer array with values and check if a given number is present in the array or not.

If the number is not found, it will print -1 else it will print the index value of the given number in the array.

Example 1) If the Array elements are (1,4,34,56,7} and the search element is 90, then the output expected is -1.

Example 2)If the Array elements are (1,4,34,56,7) and the search element is 56, then the output expected is 3.

**Program:**

import java.util.\*;

public class Main

{

public static void main(String[] args) {

int arr1[]=new int[3];

Scanner inp=new Scanner(System.in);

for(int i=0;i<3;i++) {

arr1[i]=inp.nextInt();

}

for(int i=0;i<3;i++) {

System.out.print(arr1[i]+" ");

}

System.out.println("enter the searching element:");

int search=inp.nextInt();

for(int i=0;i<3;i++) {

if(arr1[i]==search) {

System.out.println(i);

break;

}

else {

System.out.println("-1");

break;

}

}

}

}

/////Initialize an integer array with ascii values and print the corresponding character values in a single row.

**Program:-**

import java.util.\*;

public class Main

{

public static void main(String[] args) {

int arr[] = {65,66,67,68,69};

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

{

System.out.print((char)arr[i]);

}

}

}

////Write a program to find the largest 2 numbers and the smallest 2 numbers in the given array.

**Program:**

import java.util.\*;

public class Main

{

public static void main(String[] args) {

int arr[]=new int[5];

Scanner sc=new Scanner(System.in);

for(int i=0;i<5;i++)

{

arr[i]=sc.nextInt();

}

Arrays.sort(arr);

System.out.println("the largest 2 elements :"+arr[arr.length-1]+"," +arr[arr.length-2]);

System.out.println("the smallest 2 elements :"+arr[0]+"," +arr[1]);

}

}

////Write program to initialize an array and print them in a sorted order.

**Program:**

import java.util.\*;

public class Main

{

public static void main(String[] args) {

int arr[]=new int[5];

Scanner sc=new Scanner(System.in);

for(int i=0;i<5;i++)

{

arr[i]=sc.nextInt();

}

Arrays.sort(arr);

for(int i:arr)

{

System.out.print(i+" ");

}

}

}

/////Write a program to remove the duplicate elements in an array and print the same.

Example:

I/P:{12, 34,12,45,67,89}

I/P:{12, 34,45,67,89}

**program:**

class Main {

public static void main(String[] args) {

int arr[] = { 12,34,45,67,89,12 };

int l = arr.length;

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

boolean flag = false;

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

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

flag = true;

}

}

if (flag) {

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

arr[i] = arr[i+1];

}

l--;

}

}

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

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

}

System.out.println();

}

}

////Write a program to print the sum of the elements of an array following the given below condition.

If the array has 6 and 7 in succeeding orders, ignore the numbers between 6 and 7 and consider the other numbers for calculation of sum.

Eg1) Array Elements- 10,3,6,1,2,7,9

O/P:22

[I.e 10+3+9]

Eg2) Array Elements- 7,1,2,3,6

O/P:19

Eg3) Array elements- 1, 6,4,7,9

O/P:10

**Program:**

public class Main

{

static void conditionalSum(int l[], int a, int b) {

int sum = 0;

boolean add = true;

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

if (l[i] != a && add == true)

sum = sum + l[i];

else if (l[i] == a)

add = false;

else if (l[i] == b)

add = true;

}

System.out.println(sum);

}

public static void main(String[] args) {

int arr[] = {10,3,6,1,2,7,9};

int a = 6;

int b = 7;

conditionalSum(arr,a,b);

}

}

////Print a version of the given array where all the 10's have been removed. The remaining elements should shift left towards the start of the array as needed, and the empty spaces at the end of the array should be e. So {1, 10, 10, 2} yields (1, 2, 8, 8). You may modify and display the given array or make a new array.

without Ten [1, 10, 10, 2] )-> [1,2, 0, 0]

without Ten ([10, 2, 10]) -> [2, 0, 0]

without Ten ([1, 99, 10]) -> [1, 99, 0]

**Program:**

public class Main

{

private static int[] arr = {1,10,10,2};

public static int[] RemoveTen(int[] nums) {

int[] copy = new int[nums.length];

int j = 0;

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

if (nums[i] != 10) {

copy[j] = nums[i];

j++;

}

return copy;

}

public static void main(String[] args) {

int[] result = RemoveTen(arr);

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

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

}

}

}

////Given an array of type int, print true if every element is 1 or 4.

only14([1, 4, 1, 4])-> true

only14([1, 4, 2, 4]) ->false

only14([1, 1]) ->true

**Program:**

import java.util.\*;

public class Main

{

public static void main(String[] args) {

int n,flag=0;

Scanner sc=new Scanner(System.in);

System.out.print("Enter no.of elements:");

{

n=sc.nextInt();

}

int[] a=new int[n];

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

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

{

a[i]=sc.nextInt();

}

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

{

if(a[i]!=1&&a[i]!=4)

{

flag=0;

break;

}

else{

flag=0;

break;

}

}

if(flag==1)

{

System.out.print("True");

}

else

{

System.out.print("false");

}

}

}

////Given 2 int arrays, a and b, each length 3, form a new array of length 2, containing their middle elements.

middleway ([1, 2, 3], [4, 5, 6])-> [2, 5]

middleway([7, 7, 7], [3, 8, 0])-> [7, 8]

middleway ([5, 2, 9], [1, 4, 5])-> [2,4]

**Program:**

import java.util.\*;

public class Main

{

public static void main(String[] args) {

int n,flag=0;

Scanner sc=new Scanner(System.in);

System.out.print("Enter no.of elements:");

{

n=sc.nextInt();

}

int[] a=new int[n];

int[] b=new int[n];

int[] c=new int[n];

System.out.print("Enter elements of a:");

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

{

a[i]=sc.nextInt();

}

System.out.print("Enter elements of b:");

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

{

b[i]=sc.nextInt();

}

c[0]=a[1];

c[1]=b[1];

System.out.print("New array elements:");

for(int i=0;i<2;i++)

{

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

}

}

}

///Write a program to reverse the elements of a given 2\*2 array. Four integer numbers needs to be passed as Command Line arguments.

Example1)

C:\>java Sample 1 2 3

O/P: Please enter 4 integer numbers

Example2)

C:\>java Sample 1 2 3 4

O/P:

The given array is:

1 2

3 4

The reverse of the array is:

4 3

2 1

**Program:**

import java.util.\*;

public class Main

{

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

int[][] a=new int[2][2];

System.out.print("Enter elements of a: ");

for(int i=0;i<2;i++){

for(int j=0;j<2;j++){

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

}

}

System.out.println("Before reverse: ");

for(int i=0;i<2;i++)

{

for(int j=0;j<2;j++)

{

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

}

System.out.println();

}

System.out.println("After reverse: ");

for(int i=1;i>=0;i--)

{

for(int j=1;j>=0;j--)

{

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

}

System.out.println();

}

}

}

///Write a program to find the biggest number in a 3\*3 array. The program is supposed to receive 9 integer numbers as command line arguments.

Example1:

C:\>java Sample 1 2 3

O/P: Please enter 9 integer numbers

Example2:

C:\>java Sample 1 23 45 55 121 222 56 77 89

O/P:

The given array is :

1 23 45

55 121 222

56 77 89

The biggest number in the given array is 222

**Program:**

import java.util.\*;

public class Main

{

public static void main(String[] args) {

int [][] a = new int[3][3];

Scanner z = new Scanner(System.in);

for(int i=0;i<3;i++)

{

for(int j=0;j<3;j++)

{

a[i][j] = z.nextInt();

}

}

int max = a[0][0];

for(int i=0;i<3;i++)

{

for(int j=0;j<3;j++)

{

if(a[i][j]>max)

{

max = a[i][j];

}

}

}

System.out.println("Maximum number:"+max);

}

}