**Java programs day2**

Write a program to swap two numbers without a third variable..

public class swap\_wo\_variable {

public static void main(String[] args) {

// TODO Auto-generated method stub

int f1=4, f2=6;

System.out.println("before swap "+f1+" "+f2);

f1=f1+f2;

f2=f1-f2;

f1=f1-f2;

System.out.println("after swapping "+f1+" "+f2);

}

}

Output:

before swap 4 6

after swapping 6 4

Write a program to swap two numbers with third variable..

public class swap\_with\_3variable {

public static void main(String[] args) {

// TODO Auto-generated method stub

int f1=5, f2=8, temp;

System.out.println("before swap "+f1+" "+f2);

temp=f1;

f1=f2;

f2=temp;

System.out.println("after swapping "+f1+" "+f2);

}

}

Output:

before swap 5 8

after swapping 8 5

Write a program to search an element in an array..

public class search\_array {

public static void main(String[] args) {

// TODO Auto-generated method stub

int n, x, flag = 0, i = 0;

Scanner sc = new Scanner(System.in);

System.out.print("Enter no. of elements you want in array:");

n = sc.nextInt();

int a[] = new int[n];

System.out.println("Enter all the elements:");

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

{

a[i] = sc.nextInt();

}

System.out.print("Enter the element you want to find:");

x = sc.nextInt();

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

{

if(a[i] == x)

{

flag = 1;

break;

}

else

{

flag = 0;

}

}

if(flag == 1)

{

System.out.println("Element found at position:"+(i + 1));

}

else

{

System.out.println("Element not found");

}

}

}

Output:

Enter no. of elements you want in array:4

Enter all the elements:

34 57 27 98

Enter the element you want to find:27

Element found at position😊

Write a program to calculate simple athematic operations

public class calculater {

public static void main(String[] args) {

// TODO Auto-generated method stub

char operator;

Double number1, number2, result;

// create an object of Scanner class

Scanner input = new Scanner(System.in);

// ask users to enter operator

System.out.println("Choose an operator: +, -, \*, or /");

operator = input.next().charAt(0);

// ask users to enter numbers

System.out.println("Enter first number");

number1 = input.nextDouble();

System.out.println("Enter second number");

number2 = input.nextDouble();

switch (operator) {

// performs addition between numbers

case '+':

result = number1 + number2;

System.out.println(number1 + " + " + number2 + " = " + result);

break;

// performs subtraction between numbers

case '-':

result = number1 - number2;

System.out.println(number1 + " - " + number2 + " = " + result);

break;

// performs multiplication between numbers

case '\*':

result = number1 \* number2;

System.out.println(number1 + " \* " + number2 + " = " + result);

break;

// performs division between numbers

case '/':

result = number1 / number2;

System.out.println(number1 + " / " + number2 + " = " + result);

break;

default:

System.out.println("Invalid operator!");

break;

}

input.close();

}

}

Output:

Choose an operator: +, -, \*, or /

\*

Enter first number

12

Enter second number

43

12.0 \* 43.0 = 516.0

Write a program to sort the array ...

public class bubble\_sort {

public static void main(String[] args) {

// TODO Auto-generated method stub

int n, c, d, swap;

Scanner sc = new Scanner(System.in);

System.out.println("Input number of integers to sort");

n = sc.nextInt();

int array[] = new int[n];

System.out.println("Enter " + n + " integers");

for (c = 0; c < n; c++)

array[c] = sc.nextInt();

for (c = 0; c < ( n - 1 ); c++) {

for (d = 0; d < n - c - 1; d++) {

if (array[d] > array[d+1])

/\* For descending order use < \*/ {

swap = array[d];

array[d] = array[d+1];

array[d+1] = swap;

}

}

}

System.out.println("Sorted list of numbers");

for (c = 0; c < n; c++)

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

}

}

Output:

Input number of integers to sort

4

Enter 4 integers

868 547 27 25

Sorted list of numbers

25 27 547 868