Assignment -1

1.Implement the program of addition, subtraction, division and multiplication of two numbers.Take the input from user

**package** assigments;

**import** java.util.Scanner;

**public** **class** AirthmeticOperations

{

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

{

**int** no1,no2,add,sub,mul,div;

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

System.***out***.println("Enter two nos");

no1=scanner.nextInt();

no2=scanner.nextInt();

add=no1+no2;

System.***out***.println("Addition of two nos is "+add);

sub=no1-no2;

System.***out***.println("Substraction of two nos is "+sub);

mul=no1\*no2;

System.***out***.println("Multiplication of two nos is "+mul);

div=no1/no2;

System.***out***.println("Division of two nos is "+div);

scanner.close();

}

}

2. Calculate the areas of different shapes using Switch Case.

**package** assigments;

**import** java.util.Scanner;

**public** **class** AreaSwitch

{

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

{

**int** ch;

**double** side,sq,radius,cir,rect,len,b,tri,h;

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

System.***out***.println("1.Area of square");

System.***out***.println("2.Area of circle");

System.***out***.println("3.Area of rectangle");

System.***out***.println("4.Area of triangle");

System.***out***.println("5.For exit");

**while**(**true**)

{

System.***out***.println("Enter your choice");

ch=scanner.nextInt();

**switch**(ch)

{

**case** 1:

System.***out***.println("Enter a side of square: ");

side=scanner.nextDouble();

sq=side\*side;

System.***out***.println("area of square: "+sq);

**break**;

**case** 2:

System.***out***.println("Enter radius of circle: ");

radius= scanner.nextDouble();

cir=3.14\*radius\*radius;

System.***out***.println("area of circle: "+cir);

**break**;

**case** 3:

System.***out***.println("Enter length and breadth of rectangle: ");

len=scanner.nextDouble();

b=scanner.nextDouble();

rect=len\*b;

System.***out***.println("area of rectangle: "+rect);

**break**;

**case** 4:

System.***out***.println("Enter base and height of triangle: ");

b= scanner.nextDouble();

h= scanner.nextDouble();

tri=0.5\*b\*h;

System.***out***.println("Area of triangle: " +tri);

**break**;

**case** 5:

System.*exit*(0);

**default**:

System.***out***.println("Invalid choice!!!");

**break**;

}

}

}

}

3. What will be the output of following program?

public class PostIncrement {

public static void main(String[] args) {

int num1 = 1;

int num2 = 1;

num1++;

num2++;

System.out.println("num1 = " + num1);

System.out.println("num2 = " + num2);

}

}

Output is-

num1=2

num2=2

4. What will be the output of following program

public class Demo {

public static void main(String[] args) {

int num1 = 1;

int num2 = 1;

--num1;

--num2;

System.out.println("num1 = " + num1);

System.out.println("num2 = " + num2);

}

}

Output is-

num1=0

num2=0

5. Implement a program on bitwise operators.

**package** basic\_programs;

**public** **class** BitwiseOperator

{

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

{

**int** no1=8, no2=2, or, and, xor, rightShift,leftShift, UnsignedRightShift;

or=no1|no2;

System.***out***.println("print" +or);

and=no1&no2;

System.***out***.println("print" +and);

xor=no1^no2;

System.***out***.println("print" +xor);

rightShift=no1>>no2;

System.***out***.println("print" +rightShift);

leftShift=no1<<no2;

System.***out***.println("print" +leftShift);

UnsignedRightShift=no1>>>no2;

System.***out***.println("print" +UnsignedRightShift);

}

}

6. Implement a program on logical operators.

**package** basic\_programs;

**public** **class** LogicalOperator

{

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

{

**int** no1=20, no2=89;

**boolean** check;

check = no1>no2&& no1>5;

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

check= no1>no2||no1>5;

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

check= !(no1>no2&&no1>5);

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

}

}

7. Find out given number is divisible by 5 as well as 7 or not.

**package** assigments;

**import** java.util.Scanner;

**public** **class** Division7And5

{

**public** **static** **void** main(String[] args) // Divison by 7 and 5

{

**int** num;

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

System.***out***.println("Enter the number");

num=scanner.nextInt();

**if**(no[i]%5==0&& no[i]%7==0)

{

System.***out***.println(“Number is divisible by 5 and 7” +num);

}

else

{

System.***out***.println(“Number is not divisible by 5 and 7” +num);

}

}

}

8. Display the elements from an array which are divisible by 5 or 7.

**package** assigments;

**import** java.util.Scanner;

**public** **class** Division5Or7

{

**public** **static** **void** main(String[] args) // Divison by 7 and 5

{

**int** size;

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

System.***out***.println("Enter the size");

size=scanner.nextInt();

**int** no[]=**new** **int**[size];

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

**for**(**int** i=0;i<no.length;i++)

{

no[i]=scanner.nextInt();

}

System.***out***.println("Number divisible by 5 and 7:");

**for**(**int** i=0;i<no.length;i++)

{

**if**(no[i]%5==0|| no[i]%7==0)

{

System.***out***.println(no[i]);

}

}

scanner.close();

}

}

9. Display the elements from array which are not divisible by 3.

**package** assigments;

**import** java.util.Scanner;

**public** **class** Division3OrNot

{

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

{

**int** size;

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

System.***out***.println("Enter the size");

size=scanner.nextInt();

**int** no[]=**new** **int**[size];

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

**for**(**int** i=0;i<no.length;i++)

{

no[i]=scanner.nextInt();

}

System.***out***.println("Number is not divisible 3");

**for**(**int** i=0;i<no.length;i++)

{

**if**(!(no[i]%3==0))

{

System.***out***.println(no[i]);

}

}

scanner.close();

}

}

10. Display the smallest element from an array.

**package** assigments;

**import** java.util.Scanner;

**public** **class** SmallestElement

{

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

{

**int** size,i,small;

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

System.***out***.println("Enter the size");

size=scanner.nextInt();

**int** no[]=**new** **int**[size];

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

**for**(i=0;i<no.length;i++)

{

no[i]=scanner.nextInt();

}

small=no[0];

**for**(i=0;i<no.length;i++)

{

**if**(no[i]<small)

{

small=no[i];

}

}

System.***out***.println("Smallest element is: "+small);

}

}

11. Display the greatest element from an array.

**package** assigments;

**import** java.util.Scanner;

**public** **class** MaximumElement

{

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

{

**int** size,i,greatest;

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

System.***out***.println("Enter the size of array");

size=scanner.nextInt();

**int** no[]=**new** **int**[size];

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

**for**(i=0;i<no.length;i++)

{

no[i]=scanner.nextInt();

}

greatest=no[0];

**for**(i=0;i<no.length;i++)

{

**if**(no[i]>greatest)

{

greatest=no[i];

}

}

System.***out***.println("Greatest element is: "+greatest);

}

}

12. Display the smallest even number from an array

**package** assigments;

**import** java.util.Scanner;

**public** **class** SmallestEvenNumber

{

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

{

**int** size,i,num1;

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

System.***out***.println("Enter the size of array");

size=scanner.nextInt();

**int** no[]=**new** **int**[size];

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

**for**(i=0;i<no.length;i++)

{

no[i]=scanner.nextInt();

}

num1=no[0];

**for**(i=0;i<no.length;i++)

{

**if**( no[i]<num1 && no[i] %2 == 0)

{

num1 = no[i];

}

}

System.***out***.println("Smallest even no. is: "+num1);

}

}

13. Display the greatest odd number from an array

**package** assigments;

**import** java.util.Scanner;

**public** **class** GreatestOdd

{

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

{

{

**int** size,i,num1;

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

System.***out***.println("Enter the size of array");

size=scanner.nextInt();

**int** no[]=**new** **int**[size];

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

**for**(i=0;i<no.length;i++)

{

no[i]=scanner.nextInt();

}

num1=no[0];

**for**(i=0;i<no.length;i++)

{

**if**( no[i]>num1 && no[i] %2 != 0)

{

num1 = no[i];

}

}

System.***out***.println("Greatest odd no. is: "+num1);

}

}

14. Write any program which shows the use of ternary operator.

**package** assigments;

**import** java.util.Scanner;

**public** **class** TernaryOperator

{

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

{

**int** num1,num2;

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

System.***out***.println("Enter two numbers");

num1=scanner.nextInt();

num2=scanner.nextInt();

System.***out***.println("Result = " +(num1 > num2 ? num1+" is greater than "+num2 :num2+" is greater than "+num1));

}

}