**1 PROGRAM:- WAP using type casting program**.

class FirstName

{

public static void main(String args[])

{

int a=83,b=72,c=73,d=86,e=65,f=77;

char p=(char)a;

char q=(char)b;

char r=(char)c;

char s=(char)d;

char t=(char)e;

char u=(char)f;

System.out.println(p+" "+q+" "+r+" "+s+" "+t+" "+u);

}

}

**2 PROGRAM:- WAP to swap two numbers without using third variable.**

class swap

{

public static void main(String args[])

{

int x=10,y=20;

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

System.out.println(x);

System.out.println(y);

x=x+y;

y=x-y;

x=x-y;

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

System.out.println(x);

System.out.println(y);

}

}

**3 PROGRAM:-** WAP to add two numbers without using "+" operator.

class p\_operator

{

public static void main(String args[])

{

int x=10,y=30;

int sum=x-(-y);

System.out.println("Addition of "+x+" and "+y+" is: "+sum);

}

}

**4 PROGRAM:-** WAP to check whether a person is eligible for voting or not**.**

### import java.util.Scanner;

### class UserInput

### {

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

### {

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

### byte age;

### char gen;

### 

### System.out.println("Enter your gen: ");

### gen=s.nextLine().charAt(0);

### System.out.println("Enter your age: ");

### age=s.nextByte();

### 

### if(age>=18)

### {

### System.out.println("You are Eligible for vote: ");

### }

### else

### {

### System.out.println("You are not Eligible for vote: ");

### }

### 

### }

### }

### 4 PROGRAM:- .WAP [to find percentage and grade of student entered by user](https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&cad=rja&uact=8&ved=0ahUKEwjz07HBrNHUAhUHLI8KHet9AXIQFgg2MAM&url=http%3A%2F%2Fwww.cprogramto.com%2Fjava-program-to-finds-percentage-and-grade-of-student-entered-by-user%2F&usg=AFQjCNEVH_OFGF7QYEMpKXyL7BoVKyWTxg)

### import java.util.Scanner;

### class Marks

### {

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

### {

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

### byte java,php,cpp;

### int s\_marks;

### int per;

### int total\_marks;

### 

### System.out.println("Enter your Marks: " );

### 

### java=s.nextByte();

### php=s.nextByte();

### cpp=s.nextByte();

### 

### System.out.println("JAVA: "+java);

### System.out.println("PHP: "+php);

### System.out.println("CPP: "+cpp);

### s\_marks=java+php+cpp;

### System.out.println("Total Marks: "+s\_marks);

### 

### total\_marks=300;

### per=s\_marks\*100/total\_marks;

### System.out.println("Percentage: "+per);

### if(per<40)

### {

### System.out.println("Fail: ");

### }

### else if(per>=40&&per<50)

### {

### System.out.println("Average: ");

### }

### else if(per>=50&&per<70)

### {

### System.out.println("Good: ");

### }

### else if(per>=70&&per<85)

### {

### System.out.println("Very Good: ");

### }

### else if(per>=85)

### {

### System.out.println("Excellent: ");

### }

### else if(per<0&&per>100)

### {

### System.out.println("Error: ");

### }

### }

### }

### 5 PROGRAM:- WAP [to find percentage and grade of students](https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&cad=rja&uact=8&ved=0ahUKEwjz07HBrNHUAhUHLI8KHet9AXIQFgg2MAM&url=http%3A%2F%2Fwww.cprogramto.com%2Fjava-program-to-finds-percentage-and-grade-of-student-entered-by-user%2F&usg=AFQjCNEVH_OFGF7QYEMpKXyL7BoVKyWTxg) using switch case.

### import java.util.Scanner;

### class case\_

### {

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

### {

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

### byte java,php,cpp;

### int s\_marks;

### int per;

### int total\_marks;

### 

### System.out.println("Enter your Marks: " );

### 

### java=s.nextByte();

### php=s.nextByte();

### cpp=s.nextByte();

### 

### System.out.println("JAVA: "+java);

### System.out.println("PHP: "+php);

### System.out.println("CPP: "+cpp);

### s\_marks=java+php+cpp;

### System.out.println("Total Marks: "+s\_marks);

### 

### total\_marks=300;

### per=s\_marks\*100/total\_marks;

### System.out.println("Percentage: "+per);

### if(per<40)

### {

### System.out.println("Fail: ");

### }

### else if(per>=40&&per<50)

### {

### System.out.println("Average: ");

### }

### else if(per>=50&&per<70)

### {

### System.out.println("Good: ");

### }

### else if(per>=70&&per<85)

### {

### System.out.println("Very Good: ");

### }

### else if(per>=85)

### {

### System.out.println("Excellent: ");

### }

### else if(per<0&&per>100)

### {

### System.out.println("Error: ");

### }

### System.out.println("Enter your grade: ");

### String grade=s.nextLine();

### switch(grade)

### {

### case "Fail":

### System.out.println("student marks <40");

### break;

### 

### case "Average":

### System.out.println("student marks <50");

### break;

### case "Good":

### System.out.println("student marks 60");

### break;

### 

### case "Very Good":

### System.out.println("student marks 70");

### break;

### }

### }

### }

### 6 PROGRAM:- WAP to make pattern in java.

### 6.1)

### class loop

### {

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

### {

### int i,j;

### 

### for(i=1;i<=4;i++)

### {

### for(j=1;j<=4;j++)

### {

### if(i==1||j==i)

### {

### System.out.print(j);

### }

### else if(i<4||j<4)

### {

### System.out.print(j);

### }

### }

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

### }

### 

### 

### }

### }

### 6.2)

### class star

### {

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

### {

### int i,j;

### for(i=1;i<=5;i++)

### {

### for(j=1;j<=i;j++)

### {

### if(i==4||j<=i)

### System.out.print("$");

### }

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

### }

### }

### }

### 6.3)

### class N\_loop

### {

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

### {

### for(int p=1;p<=5;p++)

### {

### for(int q=5;q>=p;q--)

### {

### System.out.print(q);

### }

### System.out.println();

### }

### }

### }

### 6.4)

### class p\_loop

### {

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

### {

### int p,q,k;

### for(p=1;p<=5;p++)

### {

### for(k=4;k>=p;k--)

### {

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

### }

### for(q=1;q<=p;q++)

### {

### System.out.print(q);

### }

### System.out.println();

### }

### }

### }

### 6.5)

### class break

### {

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

### {

### int p,q,r;

### for(int p=1;p<=5;p++)

### {

### for(int k=4;k>=p;k--)

### {

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

### }

### for(int q=1;q<=p;q++)

### {

### System.out.print(q);

### }

### System.out.println();

### }

### }

### }

### 6.6)

### class ptrn

### {

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

### {

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

### {

### for(int j=4;j>=i;j--)

### {

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

### }

### for(int k=1;k<=i;k++)

### {

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

### }

### System.out.println();

### }

### }

### }

### 6.7)

### class t\_ptrn

### {

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

### {

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

### {

### for (int j=4;j>=i;j--)

### {

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

### }

### for(int k=1;k<=i+2;k++)

### {

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

### }

### System.out.println();

### }

### }

### }

### 6.8)

### class exp\_n

### {

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

### {

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

### {

### for(int q=1;q<=i;q++)

### {

### System.out.print(q);

### }

### System.out.println();

### 

### }

### }

### }

### 6.9)

### class p\_loop

### {

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

### {

### int p,q,r;

### for(int p=1;p<=5;p++)

### {

### for(int k=4;k>=p;k--)

### {

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

### }

### for(int q=1;q<=p;q++)

### {

### System.out.print(q);

### }

### System.out.println();

### }

### }

### }

### 7 PROGRAM:- wap to find factorial of a number in java.

### class Fact\_exp

### {

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

### {

### int i,fact=1;

### int number=6;

### for(i=1;i<=number;i++)

### {

### fact=fact\*i;

### }

### System.out.println("Factorial of "+number+" is: "+fact);

### }

### }

### 8 PROGRAM:- wap to fibonacci series in java.

### class Fibo\_exp

### {

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

### {

### int num1=0,num2=1;

### System.out.print(num1+" "+num2);

### 

### for(int i=2;i<10;++i)

### {

### int num3=num1+num2;

### System.out.print(" "+num3);

### num1=num2;

### num2=num3;

### }

### }

### }

### 9 PROGRAM:- WAP to check the number is palindrom or not.

### class palindrom

### {

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

### {

### int n=252,r,s=0;

### int t=n;

### while(n>0)

### {

### r=n%10;

### n=n/10;

### s=s\*10+r;

### }

### if(t==s)

### {

### System.out.println("Number is palindrom");

### }

### else

### {

### System.out.println("Number is not a palindrom");

### }

### }

### }

### 10 PROGRAM:- wap to reverse a number.

### import java.util.Scanner;

### class reverse

### {

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

### {

### int n=0,r=0;

### System.out.println("Enter your number: ");

### Scanner in=new Scanner(System.in);

### int num=in.nextInt();

### while(num!=0)

### {

### r=n\*10;

### r=r+n%10;

### n=n/10;

### }

### System.out.println("Reverse number is: "+n);

### }

### }

### 11 PROGRAM:- WAP using do while loop.

### class num

### {

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

### {

### int x=11;

### do

### {

### System.out.println(x);

### x++;

### }

### while(x<=10);

### }

### }

### 12 PROGRAM:- WAP using continue statement.

### class e\_num

### {

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

### {

### int x=1;

### for(x=1;x<=100;x++)

### {

### if(x%2!=0)

### continue;

### System.out.println(x);

### }

### }

### 

### }

### 13 PROGRAM:- wap to check number is armstrong or not.

### class ArmstrongExample

### {

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

### {

### int c=0,a,temp;

### int n=153;

### temp=n;

### while(n>0)

### {

### a=n%10;

### n=n/10;

### c=c+(a\*a\*a);

### }

### if(temp==c)

### System.out.println("armstrong number");

### else

### System.out.println("Not armstrong number");

### }

### }

### 14 PROGRAM:- wap for bubble sort in java.

### class bubble

### {

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

### {

### int array[]={50,12,68,23,9,45};

### int swap;

### 

### for(int c=0;c<array.length-1;c++)

### {

### for(int d=0;d<array.length-c-1;d++)

### {

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

### {

### swap=array[d];

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

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

### }

### }

### }

### for(int c=0;c<array.length;c++)

### {

### System.out.println(array[c]);

### }

### }

### }

### 15 PROGRAM:- wap for bubble sort by taking input values from user.

### import java.util.Scanner;

### class bubble\_s

### {

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

### {

### int n,c,d,swap;

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

### System.out.println("Enter number to sort: ");

### n=scanner.nextInt();

### int array[]=new int[n];

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

### 

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

### {

### array[c] = scanner.nextInt();

### }

### 

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

### {

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

### {

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

### {

### 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.println(array[c]);

### }

### }

### }

### 16 PROGRAM:- wap for linear search in java.

### import java.util.Scanner;

### class Linear\_s

### {

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

### {

### int n,c,search;

### 

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

### System.out.println("Enter number of elements");

### 

### n=s.nextInt();

### int array[]=new int[n];

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

### 

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

### {

### array[c]=s.nextInt();

### }

### 

### System.out.println("Enter value to find: ");

### search=s.nextInt();

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

### {

### if(array[c]==search)

### {

### System.out.println(search+" is present at location "+(c+1));

### break;

### }

### }

### if(c==n)

### {

### System.out.println(search+" is not present in array");

### }

### }

### }

### 17 PROGRAM:- wap to check the number is prime or not.

### class PrimeExample

### {

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

### {

### int i,m=0,flag=0;

### int n=17;

### m=n/2;

### for(i=2;i<=m;i++)

### {

### if(n%i==0)

### {

### System.out.println("Number is not prime");

### flag=1;

### break;

### }

### }

### if(flag==0)

### {

### System.out.println("Number is prime");

### }

### }

### }

### 18 PROGRAM:- wap to find largest number in array.

### import java.util.Scanner;

### class Largest\_Number

### {

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

### {

### int n, max;

### 

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

### System.out.print("Enter number of elements in the array: ");

### n = s.nextInt();

### int a[] = new int[n];

### System.out.println("Enter elements of array:");

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

### {

### a[i]=s.nextInt();

### }

### max=a[0];

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

### {

### if(max<a[i])

### {

### max=a[i];

### }

### }

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

### }

### }

### 19 PROGRAM:- WAP using array in java.

### class ArrayDemo

### {

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

### {

### float marks[]={23.45f,56.67f,11.45f,88.50f};

### float temp;

### //for loop

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

### {

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

### {

### if(marks[j]<marks[i])

### {

### temp=marks[i];

### marks[i]=marks[j];

### marks[j]=temp;

### }

### }

### }

### /\*for each

### for(float i:marks)//element by element

### {

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

### }\*/

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

### {

### System.out.println(marks[i]);

### }

### }

### }

### 20 PROGRAM:- wap for binary search in java.

### import java.util.Scanner;

### class binary

### {

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

### {

### int array[],n,search,loc,mid;

### 

### System.out.println("Enter number of elements");

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

### n=s.nextInt();

### array=new int[n];

### 

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

### 

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

### {

### array[c]=s.nextInt();

### System.out.println("Enter value to find:");

### search=s.nextInt();

### loc=array.length/2;

### mid=array[loc];

### 

### }

### 

### if(search==mid)

### {

### System.out.println("Element found");

### }

### else if(search<mid)

### {

### for(int c=0;c<loc;c++)

### {

### if(search==array[c])

### {

### System.out.println("Element found");

### break;

### }

### }

### }

### else if(search>mid)

### {

### for(int d=loc+1;d<array.length;d++)

### {

### if(search==array[d])

### {

### System.out.println("Element found");

### break;

### }

### }

### }

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

### {

### System.out.println(array[c]);

### }

### }

### }

### 