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1. **WAJP TO REVERSE THE GIVRN NUMBER**

**public** **class** Revers {

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

**int** rev=0;

**int** a=123;

**while**(a!=0) {

**int** rem=a%10;

rev=rev\*10+rem;

a=a/10;

}

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

}

}

1. **WAJP TO CHECK THE GIVEN NUMBER IS PALINDROME OR NOT**

**public** **class** Palindrome {

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

**int** rev=0;

**int** a=11211;

**int** b=a;

**while**(a!=0) {

**int** rem=a%10;

rev=rev\*10+rem;

a=a/10;

}

**if**(rev==b) {

System.***out***.println("the entered number is PALINDROME");

}**else** {

System.***out***.println("the entered number is NOT A PALINDROME");

}

}

}

1. **WAJP TO GET COUNT OF DIGITS IN A GIVEN NUMBER**

**public** **class** Count {

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

**int** a=7806;

**int** count=0;

**while**(a!=0) {

count++;

a=a/10;

}

System.***out***.println("the number of digits is : "+count);

}

}

1. **WAJP TO COUNT THE NUMBER OF EVEN AND ODD DIGITS IN A GIVEN NUMBER**

**public** **class** CuEvOd {

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

**int** a=125689;

**int** evencount=0;

**int** oddcount=0;

**while**(a!=0) {

**int** rem=a%10;

**if**(rem%2==0) {

evencount++;

}**else** {

oddcount++;

}

a=a/10;

}

System.***out***.println("EVEN COUNT : "+evencount+" ODD COUNT : "+oddcount);

}

}

1. **WAJP TO GET THE SUM OF DIGITS IN A GINEN NUMBER**

**public** **class** Sum {

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

**int** a=123;

**int** sum=0;

**while**(a!=0) {

**int** rem=a%10;

sum=sum+rem;

a=a/10;

}

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

}

}

1. **WAJP TO PRINT PRIME NUMBERS IN THE GIVEN RANGE**

**public** **class** PrimeRange {

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

**int** n=100;

**for**(**int** a=1; a<=n; a++) {

**int** count=0;

**for**(**int** i=1; i<=a; i++) {

**if**(a%i==0) {

count++;

}

}

**if**(count==2) {

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

}

}

}

}

1. **WAJP TO PRINT GIVEN NUMBER IS PRIME OR NOT**

**import** java.util.Scanner;

**public** **class** PrimeYN {

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

Scanner s1=**new** Scanner(System.***in***);

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

**int** n=s1.nextInt();

**int** count=0;

**for**(**int** i=1; i<=n; i++) {

**if**(n%i==0) {

count++;

s1.close();

}

}

**if**(count==2) {

System.***out***.println("The given number "+n+" is prime number");

}**else** {

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

}

}

}

1. **WAJP TO SWAP TWO NUMBERS USING TEMP VARIABLE AND WITHOUT TEMP VERIABLE**

**public** **class** Swap {

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

**int** a=5;

**int** b=10;

System.***out***.println("original a value : "+a);

System.***out***.println("original b value : "+b);

**int** t=a; //a=a+b; //b=a+b-(a=b);

a=b; //b=a-b;

b=t; //a=a-b;

System.***out***.println("Swaped a value : "+a);

System.***out***.println("Swaped b value : "+b);

}

}

1. **WAJP TO CHECK THE GIVEN NUMBER IS ARMSTRONG NUMBER OR NOT**

**public** **class** Armstrong {

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

**int** a=153;

**int** b=a;

**int** total=0;

**int** count=0;

**while**(b!=0) {

count++;

b=b/10;

}

**int** c=a;

**while**(c!=0) {

**int** eachNumberPower=1;

**int** rem=c%10;

**for**(**int** i=1; i<=count; i++) {

eachNumberPower=eachNumberPower\*rem;

}

c=c/10;

total=total+eachNumberPower;

}

**if**(a==total) {

System.***out***.println("the given number "+a+" is ARMSTRONG.");

}

}

}

**10.WAJP TO PRINT ARMSTRONG NUMBERS BETWEEN RANGE**

**public** **class** ArmstrongRang {

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

**for**(**int** a=1; a<=1000; a++) {

**int** b=a;

**int** total=0;

**int** count=0;

**while**(b!=0) {

count++;

b=b/10;

}

**int** c=a;

**while**(c!=0) {

**int** eachNumberPower=1;

**int** rem=c%10;

**for**(**int** i=1; i<=count; i++) {

eachNumberPower=eachNumberPower\*rem;

}

c=c/10;

total=total+eachNumberPower;

}

**if**(a==total) {

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

}

}

}

}

**11.WAJP TO GET FACTORIAL OF A GIVEN NUMBER**

**public** **class** Fact {

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

**int** a=4;

**int** fact=1;

**for**(**int** i=1; i<=a; i++) {

fact=fact\*i;

}

System.***out***.println(a+"! is "+fact);

}

}

**12.WAJP TO GET FACTORIAL OF A GIVEN RANGE OF NUMBERS**

**public** **class** FactRang {

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

**for**(**int** a=1; a<=20; a++) {

**int** fact=1;

**for**(**int** i=1; i<=a; i++) {

fact=fact\*i;

}

System.***out***.println(a+" ! is "+fact);

}

}

}

**13.WAJP TO PRINT FIBANOCI SERIES**

**public** **class** Fibanoci {

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

**int** n1=0;

**int** n2=1;

System.***out***.print(n1+" "+n2);

**for**(**int** i=1; i<=7; i++) {

**int** sum=n1+n2;

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

n1=n2;

n2=sum;

}

}

}

**14.WAJP TO GET LARGEST OF 3 NUMBERS**

**public** **class** LarO3 {

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

**int** a=9, b=5, c=3;

**if**(a>b) {

**if**(a>c) {

System.***out***.println("a is larger");

}

**else** {

System.***out***.println("c is larger");

}

}

**else** **if**(b>c) {

System.***out***.println("b is larger");

}

**else** {

System.***out***.println("c is larger");

}

}

}

**15.WAJP TO GET LARGEST OF 4 NUMBERS**

**public** **class** Lrgof4 {

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

**int** a=70, b=60, c=50, d=40;

**if**(a>b) {

**if**(a>c) {

**if**(a>d) {

System.***out***.println("a is largest");

}

**else** {

System.***out***.println("d is largest");

}

}

**else** **if**(c>d) {

System.***out***.println("c is largest");

}

**else** {

System.***out***.println("d is largest");

}

}

**else** **if**(b>c) {

**if**(b>d) {

System.***out***.println("b is largest");

}

**else** {

System.***out***.println("d is largest");

}

}

**else** **if**(c>d) {

System.***out***.println("c is largest");

}

**else** {

System.***out***.println("d is largest");

}

}

}

**STAR PATTERNS**

\* \* \* \* \*

\* \* \* \* \*

\* \* \* \* \*

\* \* \* \* \*

\* \* \* \* \*

**public** **class** Square {

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

**for**(**int** r=1; r<=5; r++) {

**for**(**int** c=1; c<=5; c++) {

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

}

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

}

}

}

------------------------------------------------------------------------------------------------------------------------------------------

\* \* \* \* \*

\* \* \* \*

\* \* \*

\* \*

\*

**public** **class** InTri {

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

**for** (**int** r = 1; r <= 5; r++) {

**for** (**int** c = r; c <= 5; c++) {

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

}

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

}

}

}

------------------------------------------------------------------------------------------------------------------------------------------

1

2 1

3 2 1

4 3 2 1

5 4 3 2 1

**public** **class** DecTri {

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

**for**(**int** r=1;r<=5;r++) {

**int** a=r;

**for**(**int** c=1; c<=r; c++) {

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

a--;

}

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

}

}

}

**//TO PRINT S PATTERN**

**public** **class** Alpha {

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

**for**(**int** r=1;r<=5;r++) {

**for**(**int** c=1;c<=5;c++) {

**if**(r==1&&(c>1&&c<5)||r==3&&(c>1&&c<4)||r==5&&(c<4)||r==2&&c==1||r==4&&c==4) {

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

}

**else** {

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

}

}

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

}------------------------------------------------------------------------------------------------------------------------------------------

**//TO PRINT P PATTERN**

**for**(**int** r=1;r<=7;r++) {

**for**(**int** c=1;c<=4;c++) {

**if**(c==1||r==1&&c<4||r==4&&c<4||c==4&&(r>1&&r<4)) {

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

}

**else** {

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

}

}

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

}

------------------------------------------------------------------------------------------------------------------------------------------

**//TO PRINT R PATTERN**

**for**(**int** r=1;r<=7;r++) {

**for**(**int** c=1;c<=4;c++) {

**if**(c==1||r==1&&c<4||r==4&&c<4||c==4&&(r>1&&r<4)||(r-c==3)) {

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

}

**else** {

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

}

}

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

}

------------------------------------------------------------------------------------------------------------------------------------------

/**/TO PRINT A PATTERN**

**for**(**int** r=1;r<=6;r++) {

**for**(**int** c=1;c<=5;c++) {

**if**(c==1&&r>2||c==5&&r>2||r==4||r==1&&c==3||c==2&&r==2||r==2&&c==4) {

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

}

**else** {

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

}

}

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

}

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**2-D ARRAYA**

**public** **class** Prog1 {

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

**int** [][]a= {{1,2,3},{4,5,6},{7,8,9}};

System.***out***.println("TO PRINT ELEMENTS OF AN ARRAY");

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

**for** (**int** r=0;r<a.length;r++) {

**for**(**int** c=0;c<a[0].length;c++) {

System.***out***.print(a[r][c]+" ");

}

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

}

System.***out***.println("SUBTRACTING ALL ELEMENTS IN AN ARRAY BY 1");

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

**for** (**int** r=0;r<a.length;r++) {

**for**(**int** c=0;c<a[0].length;c++) {

System.***out***.print((a[r][c]-1)+" ");

}

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

}

System.***out***.println("TO PRINT DIAGONAL ELEMENTS OF AN ARRAY");

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

**for** (**int** r=0;r<a.length;r++) {

**for**(**int** c=0;c<a[0].length;c++) {

**if**(r==c||r+c==2) {

System.***out***.print(a[r][c]+" ");

}

**else** {

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

}

}

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

}

System.***out***.println("TO PRINT ELEMENTS ABOVE DIAGONAL");

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

**for** (**int** r=0;r<a.length;r++) {

**for**(**int** c=r;c<a[0].length;c++) {

System.***out***.print((a[r][c])+" ");

}

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

}

System.***out***.println("TO PRINT ELEMENTS BELOW DIAGONAL");

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

**for** (**int** r=0;r<a.length;r++) {

**for**(**int** c=0;c<=r;c++) {

System.***out***.print((a[r][c])+" ");

}

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

}

System.***out***.println("TO GET SUM OF ALL ELEMENTS IN AN ARRAY");

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

**int** sum=0;

**for** (**int** r=0;r<a.length;r++) {

**for**(**int** c=0;c<a[0].length;c++) {

sum=sum+a[r][c];

}

}

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

System.***out***.println("TO GET SUM OF ALL DIAGONAL ELEMENTS IN AN ARRAY"); System.***out***.println("------------------------------------------------");

**int** sum1=0;

**for** (**int** r=0;r<a.length;r++) {

**for**(**int** c=0;c<a[0].length;c++) {

**if**(r==c||r+c==2) {

sum1=sum1+a[r][c];

}

}

}

System.***out***.println(sum1);

System.***out***.println("TO SWAP THE FIRST AND LAST ROW");

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

**int** r1=0;

**int** rn=2;

**for**(**int** c=0;c<a[0].length;c++) {

**int** temp=a[r1][c];

a[r1][c]=a[rn][c];

a[rn][c]=temp;

}

**for**(**int** r=0;r<a.length;r++) {

**for**(**int** c=0;c<a[0].length;c++) {

System.***out***.print(a[r][c]+" ");

}

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

}

System.***out***.println("TO SWAP FIRST COLUMN TO LAST COLUMN");

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

**int** c1=0;

**int** cn=2;

**for**(**int** r=0; r<a.length;r++) {

**int** temp=a[r][c1];

a[r][c1]=a[r][cn];

a[r][cn]=temp;

}

**for**(**int** r=0;r<a.length;r++) {

**for**(**int** c=0;c<a[0].length;c++) {

System.***out***.print(a[r][c]+" ");

}

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

}

System.***out***.println("TRANSPOSE OF MATRIX");

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

**int** [][]b=**new** **int**[3][3];

**for**(**int** r=0;r<a.length;r++) {

**for**(**int** c=0;c<a[0].length;c++) {

b[r][c]=a[c][r];

}

//System.out.println();

}

**for**(**int** r=0;r<a.length;r++) {

**for**(**int** c=0;c<a[0].length;c++) {

System.***out***.print(b[r][c]+" ");

}

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

}

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**STRINGS PROGRAMS**

**THE SUM OF DIGITS PRESENT IN THE STRING**

**public** **class** AddDigits {

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

String s = "my123name45";

**char**[] c = s.toCharArray();

**int** sum = 0;

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

**if** (c[i] > '0' && c[i] < '9') {

sum = sum + (c[i] - 48);

}

}

System.***out***.println("the sum of digits present in the String is : "+sum);

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**TO FIND THE ASCI VALUE OF GIVEN CHARACTER**

**public** **class** Asci {

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

**char** c = 'A';

**int** tem = c; // widenning (implicite type casting)

System.***out***.println("the asci value of " + c + " is : " + tem);

}

------------------------------------------------------------------------------------------------------------------------------------------

**CAPITALIZE EACH WORD FIRST LETTER**

**public** **class** CaptiEacWordFstLett {

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

String s = "trust no one, be only one";

**char**[] c = s.toCharArray();

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

**int** k = i;

**while** (i < c.length && c[i] != ' ') {

i++;

}

**if** (c[k] >= 'a' && c[k] <= 'z') {

c[k] = (**char**) (c[k] - 32);

}

}

String res = **new** String(c);

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

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

}

}------------------------------------------------------------------------------------------------------------------------------------------

**TO CHECK THE GIVEN CHAR IS VOWLE OR NOT**

**public** **class** CharVowelORnot {

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

**char** c = 'E';

**if** (c == 'a' || c == 'e' || c == 'i' || c == 'o' || c == 'u' ||

c == 'A' || c == 'E' || c == 'I' || c == 'O'|| c == 'U') {

System.***out***.println("the given char " + c + " is vowel");

} **else** {

System.***out***.println("the given char " + c + " is not vowel");

}

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

System.***out***.println("TO CHECK THE GIVEN CHAR IS ALPHABET");

**if** (c >= 'a' && c <= 'z' || c >= 'A' && c <= 'Z') {

System.***out***.println(c + " it is a character");

} **else** {

System.***out***.println(c + " it is not a character");

}

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO CHECK THE GIVEN STRING CONTAINS VOWELS ARE NOT IF CONTAINS PRINT "HI" ELSE PRINT "BYE".**

**public** **class** CheckConteVowels {

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

String s = "abecidoUs";

**char**[] c = s.toCharArray();

**int** acount = 0, ecount = 0, icount = 0, ocount = 0, ucount = 0;

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

**char** choice = c[i];

**switch** (choice) {

**case** 'a':

acount++;

**break**;

**case** 'e':

ecount++;

**break**;

**case** 'i':

icount++;

**break**;

**case** 'o':

ocount++;

**break**;

**case** 'u':

ucount++;

**break**;

}

}

**if** (acount >= 1 && ecount >= 1 && icount >= 1&& ocount >= 1 && ucount >= 1) {

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

} **else** {

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

}

}}

------------------------------------------------------------------------------------------------------------------------------------------

**TO CONVERT UPPER TO LOWER**

**public** **class** ConUpptoLow {

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

String s = "SHAshi";

String res = "";

String res1 = "";

String res2 = "";

**char**[] c = s.toCharArray();

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

// TO CONVERT UPPER CHAR TO LOWER CHAR

**if** (c[i] >= 'A' && c[i] <= 'Z') {

res = res + (**char**) (c[i] + 32);

} **else** {

res = res + c[i];

}

// TO CONVERT LOWER CHAR TO UPPER CHAR

**if** (c[i] >= 'a' && c[i] <= 'z') {

res1 = res1 + (**char**) (c[i] - 32);

} **else** {

res1 = res1 + c[i];

}

// TO CONVERT LOWER CHAR TO UPPER CHAR AND UPPER TO LOWER

**if** (c[i] >= 'a' && c[i] <= 'z') {

res2 = res2 + (**char**) (c[i] - 32);

} **else** {

res2 = res2 + (**char**) (c[i] + 32);

}

}

System.***out***.println("original string : " + s); System.***out***.println("after conversion upper to lower : " + res);

System.***out***.println("after conversion lower to upper : " + res1);

System.***out***.println("after conversion LowToUp and UpTOLow : " + res2);

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**TO COUNT THE NUMBER OF WORDS IN THE GIVEN SENTENCE**

**public** **class** CounNumOFWords {

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

String s = "my name is bond";

// s=s+" ";

**char**[] c = s.toCharArray();

**int** count = 1; // count=0;

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

**if** (c[i] == ' ') {

count++;

}

}

System.***out***.println("sentence is : " + s);

System.***out***.println("the number of words in given sentence is : " + count);

}}

------------------------------------------------------------------------------------------------------------------------------------------

**TO COUNT NUMBER OF VOWELS IN THE GIVEN STRING**

**public** **class** Countvowels {

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

String s="JaiNTR";

**int** count=0;

**char** [] c=s.toCharArray();

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

**if**(c[i]=='a'||c[i]=='e'||c[i]=='i'||c[i]=='o'||c[i]=='u'||

c[i]=='A'||c[i]=='E'||c[i]=='I'||c[i]=='O'||c[i]=='U') {

count++;

}

}

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

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

System.***out***.println("BY USING SWITCH ");

**int** count1=0;

**for**(**int** j=c.length-1;j>=0;j--) {

**char** a=c[j];

**switch** (a) {

**case** 'a':

**case** 'e':

**case** 'i':

**case** 'o':

**case** 'u':

**case** 'A':

**case** 'E':

**case** 'I':

**case** 'O':

**case** 'U': count1++;

**break**;

}

}

System.***out***.println(count1);

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**1a2b3c4d5e🡺abbcccddddeeeee**

**public** **class** PrintLetters {

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

String s = "1a2b3c4d5e";

**char**[] c = s.toCharArray();

String res = "";

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

**int** n = c[i] - 48;

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

**char** r = c[i + 1];

res = res + r;

}

}

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

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**TO REMOVE ALL OTHER CHARACTERS EXPET ALPHABET**

**public** **class** RemoveOtherChar {

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

String s = "asmj\*&%ghj";

String res = "";

**char**[] c = s.toCharArray();

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

**if** (c[i] >= 'a' && c[i] <= 'z' || c[i] >= 'A' && c[i] <= 'Z') {

res = res + c[i];

}

}

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

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**TO REMOVE SPACE IN THE GIVEN STRING**

**public** **class** RemoveSpace {

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

String s="I AM GOD";

String res="";

String res1="";

**char** []c=s.toCharArray();

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

**if**(c[i]!=' ') {

res=res+c[i];

}

**if**(c[i]!=' '||c[i]==' '&&c[i+1]!=' ') {

res1=res1+c[i];

}

}

System.***out***.println("original string : "+s);

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

System.***out***.println("TO REMOVE TOTAL SPACES IN A GIVEN STRING");

System.***out***.println("changed String : "+res);

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

System.***out***.println("TO REMOVE EXTRA SPACES IN A GIVEN STRING");

System.***out***.println("changed String : "+res1);

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**TO REVERSE THE GIVEN STRING**

**public** **class** Reverse {

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

String s= "ssgss";

String res="";

**char** [] c=s.toCharArray();

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

res=res+c[i];

}

System.***out***.println("the given string is "+s);

System.***out***.println("reverse of string");

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

System.***out***.println("the given string is palindrome or not");

**if**(res.equals(s)) {

System.***out***.println("it is a palindrome");

}

**else** {

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

}

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**TO REVERSE EACH WORD IN A GIVEN STRING**

**public** **class** ReversEachWord {

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

String s = "revers each word";

**char**[] c = s.toCharArray();

String res = "";

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

**int** k = i;

**while** (i < c.length && c[i] != ' ') {

i++;

}

**for** (**int** j = i - 1; j >= k; j--) {

res = res + c[j];

}

**if** (i < c.length) {

res = res + c[i];

}

}

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

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**TO SWAP FIRST AND LAST LETTER IN THE GIVEN STRING**

**public** **class** SwapFirnLastLett {

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

String s = "donot stop";

**char**[] c = s.toCharArray();

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

**int** k = i;

**while** (i < c.length && c[i] != ' ') {

i++;

}

**char** temp = c[k];

c[k] = c[i - 1];

c[i - 1] = temp;

}

String res = **new** String(c);

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

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

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**ARRAYS**

**WAJP TO INSERT AN ELEMENT AT SPECIFIED INDEX POSITION**

**import** java.util.Arrays;

**public** **class** InsertEle {

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

**int**[] a = { 1, 2, 3, 4, 5, 6 };

**int** index = 2;

**int** element = 50;

**for** (**int** i = a.length - 1; i > index; i--) {

a[i] = a[i - 1];

}

a[index] = element;

System.***out***.println(Arrays.*toString*(a));

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO FIND LARGEST ELEMENT IN THE GIVEN ARRAY**

**public** **class** Largest {

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

**int**[] a = { 2, 6, 9, 5 };

**int** max = a[0];

**int** min = a[0];

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

**if** (a[i] > max) {

max = a[i];

}

**if** (a[i] < min) {

min = a[i];

}

}

System.***out***.println("the largest element in the given array is : " + max) System.***out***.println("the least element in the given array is : " + min);

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO DELETE AN ELEMENT AT SPECIFIED INDEX POSITION**

**import** java.util.Arrays;

**public** **class** RemoveEle {

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

**int**[] a = { 2, 5, 9, 6, 4 };

**int** index = 1;

**for** (**int** i = index; i < a.length - 1; i++) {

a[i] = a[i + 1];

}

System.***out***.println(Arrays.*toString*(a));

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO REVERSE THE GIVEN STRING**

**import** java.util.Arrays;

**public** **class** ReverseEle {

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

**int**[] a = { 1, 2, 3, 4 };

/\*

\* int[] temp = new int[a.length]; int n = 0; for (int i = a.length - 1; i >= 0;

\* i--) { temp[n] = a[i]; n++; }

\*/

**for** (**int** i = 0, j = a.length - 1; i < a.length / 2; i++, j--) {

**int** temp = a[i];

a[i] = a[j];

a[j] = temp;

}

System.***out***.println(Arrays.*toString*(a));

// System.out.println(Arrays.toString(temp));

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO SUM OF ALL ELEMENTS IN THE GIVEN ARRAY**

**public** **class** SumOEle {

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

**int**[] a = { 1, 2, 3, 4, 5 };

**int** sum = 0;

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

sum = sum + a[i];

}

System.***out***.println("the sum of elements present in an array is : " + sum);

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO FIND 1ST AND 2ND LARGEST ELEMENTS IN THE GIVEN ARRAY**

**public class FstSenLarg {**

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

**int []a= {10,60,55,96,70};**

**int max=0;**

**int smax=0;**

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

**if(a[i]>max) {**

**smax=max;**

**max=a[i];**

**}**

**else if(a[i]>smax) {**

**smax=a[i];**

**}**

**}**

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

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

**int min=a[0];**

**int smin=a[0];**

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

**if(a[j]<min) {**

**smin=min;**

**min=a[j];**

**}**

**else if(a[j]<smin) {**

**smin=a[j];**

**}**

**}**

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

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

**}**

**}**

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO SEPARATE EVEN AND ODD ELEMENTS IN THE GIVEN ARRAY**

**package** arrays;

**import** java.util.Arrays;

**public** **class** Seperste {

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

**int**[] a = { 3, 5, 2, 7, 8, 76 };

**int** evencount = 0;

**int** oddcount = 0;

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

**if** (a[i] % 2 == 0) {

evencount++;

} **else** {

oddcount++;

}

}

**int**[] even = **new** **int**[evencount];

**int**[] odd = **new** **int**[oddcount];

**int** n = 0;

**int** k = 0;

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

**if** (a[i] % 2 == 0) {

even[n] = a[i];

n++;

} **else** {

odd[k] = a[i];

k++;

}

}

System.***out***.println(Arrays.*toString*(a));

System.***out***.println(Arrays.*toString*(even));

System.***out***.println(Arrays.*toString*(odd));

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO FIND MISSING NUMBER ELEMENTS IN THE GIVEN ARRAY**

**public** **class** Missing {

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

**int**[] a = { 1, 3, 4, 5 };

**int** sumOfa = 0;

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

sumOfa = sumOfa + a[i];

}

**int** n = 5;

**int** totalsum = n \* (n + 1) / 2;

System.***out***.println("missing number is : " + (totalsum - sumOfa));

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO SORT THE ELEMENTS IN THE GIVEN ARRAY**

**import** java.util.Arrays;

**public** **class** Sort {

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

**int**[] a = { 1, 5, 16, 25, 30 };

System.***out***.println("TO SORT GIVEN ARRAY IN DECRESING ORDER");

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

**for** (**int** j = 0; j < a.length; j++) {

**if** (a[i] > a[j]) {

**int** temp = a[i];

a[i] = a[j];

a[j] = temp;

}

}

}

System.***out***.println(Arrays.*toString*(a));

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

System.***out***.println("TO SORT GIVEN ARRAY IN INCRESING ORDER");

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

**for** (**int** j = 0; j < a.length; j++) {

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

**int** temp = a[i];

a[i] = a[j];

a[j] = temp;

}

}

}

System.***out***.println(Arrays.*toString*(a));

}

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO CONVERT DECIMAL NUMBER TO BINERY FORM**

**public** **class** Decimal2Binery {

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

**int** a = 19;

String res = "";

**while** (a != 0) {

**int** rem = a % 2;

res = res + rem;

a = a / 2;

}

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

System.***out***.print(res.charAt(i));

}

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO BINERY TO DECINAL FORM**

**public** **class** Binery2Decimal {

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

**int** a = 1111;

**int** sum = 0;

**int** n = 0;

**while** (a != 0) {

**int** rem = a % 10;

sum = (**int**) (sum + rem \* Math.*pow*(2, n));

n++;

a = a / 10;

}

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

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO PRINT ALTERNATE POSITIVE AND NEGITIVE ELEMENTS IN THE GIVEN ARRAY**

**import** java.util.Arrays;

**public** **class** PosNeg {

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

**int**[] a = { 10, -8, -3, 5, 8, -4 };

**int**[] res = **new** **int**[a.length];

**int** x = 0;

**int** y = 1;

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

**if** (a[i] >= 0) {

res[x] = a[i];

x = x + 2;

}

}

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

**if** (a[j] < 0) {

res[y] = a[j];

y = y + 2;

}

}

System.***out***.println(Arrays.*toString*(res));

}

}

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO SAPERATE 0’S AND 1’S ELEMENTS IN THE GIVEN ARRAY**

**import java.util.Arrays;**

**public class ZeroOne {**

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

**int[] a = { 1, 0, 0, 1, 0, 1, 1, 0 };**

**int[] res = new int[a.length];**

**int x = 0;**

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

**if (a[i] == 0) {**

**res[x] = res[x] + a[i];**

**x++;**

**}**

**}**

**for (int j = 0; j < a.length; j++) {**

**if (a[j] == 1) {**

**res[x] = res[x] + a[j];**

**x++;**

**}**

**}**

**System.out.println(Arrays.toString(res));**

**// Arrays.sort(a);**

**// System.out.println(Arrays.toString(a));**

**}**

**}**

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO SEPARETE POSITIVE AND NEGITIVE ELEMENTS IN THE GIVEN ARRAY**

**import java.util.Arrays;**

**public class SepPOSnNEG {**

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

**int []a= {1,-10,30,-20,8,-3,6};**

**int p=0,n=0;**

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

**if(a[i]<0)**

**n++;**

**else**

**p++;**

**}**

**int [] pos=new int[p];**

**int []neg=new int[n];**

**int x=0, y=0;**

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

**if (a[i]>=0) {**

**pos[x]=a[i];**

**x++;**

**}else {**

**neg[y]=a[i];**

**y++;**

**}**

**}**

**System.out.println(Arrays.toString(pos));**

**System.out.println(Arrays.toString(neg));**

**int []res=new int[a.length];**

**int z=0;**

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

**res[z]=neg[i];**

**z++;**

**}**

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

**res[z]=pos[i];**

**z++;**

**}**

**System.out.println(Arrays.toString(res));**

**}**

**}**

------------------------------------------------------------------------------------------------------------------------------------------

**WAJP TO SORT THE ELEMENTS IN THE GIVEN ARRAY**

**import** java.util.Arrays;

**public** **class** Sort {

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

**int**[] a = { 1, 5, 16, 25, 30 };

System.***out***.println("TO SORT GIVEN ARRAY IN DECRESING ORDER");

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

**for** (**int** j = 0; j < a.length; j++) {

**if** (a[i] > a[j]) {

**int** temp = a[i];

a[i] = a[j];

a[j] = temp;

}

}

}

System.***out***.println(Arrays.*toString*(a));

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

System.***out***.println("TO SORT GIVEN ARRAY IN INCRESING ORDER");

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

**for** (**int** j = 0; j < a.length; j++) {

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

**int** temp = a[i];

a[i] = a[j];

a[j] = temp;

}

}

}

System.***out***.println(Arrays.*toString*(a));

}

}