**1.OPERATORS :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** hello {

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

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

**int** a = sc.nextInt();

**int** b = sc.nextInt();

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

System.***out***.println("Addition :"+(a+b));

System.***out***.println("Subtraction :"+(a-b));

System.***out***.println("Multiplication :"+(a\*b));

System.***out***.println("Division :"+(a/b));

System.***out***.println("Modulos :"+(a%b));

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

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

System.***out***.println("Greater :"+(a>b));

System.***out***.println("Lesser :"+(a<b));

System.***out***.println("Greater equal to :"+(a>=b));

System.***out***.println("Lesser equal to :"+(a<=b));

System.***out***.println("Equal to :"+(a==b));

System.***out***.println("Not :"+(a!=b));

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

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

System.***out***.println("And :"+(a>b && b!=a));

System.***out***.println("Or :"+(a<b ||b==0));

System.***out***.println("Not :"+!(a<b));

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

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

System.***out***.println("And :"+(a &b));

System.***out***.println("Or :"+(a|b));

System.***out***.println("Xor :"+(a^b));

System.***out***.println("Left shift :"+(a>>b));

System.***out***.println("Left shift :"+(a<<b));

System.***out***.println("Complement :"+(~b));

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

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

System.***out***.println("Addition :"+(a+=b));

System.***out***.println("Subtraction:"+(a-=b));

System.***out***.println("Multiplication :"+(a\*=b));

System.***out***.println("Division :"+(a/=b));

System.***out***.println("Modulos:"+(a%=b));

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

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

System.***out***.println("Pre add :"+(++b));

System.***out***.println("Post add:"+(b++));

System.***out***.println("Pre sub :"+(--a));

System.***out***.println("Post sub :"+(a++));

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

}

}

**2.TEMPERATURE** :

**package** javaproject;

**import** java.util.Scanner;

**public** **class** temperature {

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

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

**float** cel = sc.nextFloat();

**float** fah = (cel\*9/5)+32;

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

}

}

**3.AREA AND PERIMETER OF THE RECTANGLE :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** area {

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

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

**float** a = sc.nextFloat();

**float** b = sc.nextFloat();

System.***out***.println("Area :"+(a\*b));

System.***out***.println("Perimeter :"+2\*(a+b));

}

}

**4.EVEN OR ODD USING THE BITWISE OPERATOR :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** evenusingbitwise {

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

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

**int** a = sc.nextInt();

**if**((a & 1) ==0) {

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

}

**else** {

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

}

}

}

**5.SWAPING OF 2 VALUES WITH 3rd VARIABLE :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** swapwithtemp {

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

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

**int** a = sc.nextInt();

**int** b = sc.nextInt();

**int** temp=a;

a=b;

b=temp;

System.***out***.println(a+" " +b);

}

}

**6.SWAPING OF 2 VALUES WITH 3rd VARIABLE :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** swapwithoutvaar {

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

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

**int** a = sc.nextInt();

**int** b = sc.nextInt();

a=a+b;

b=a-b;

a=a-b;

System.***out***.println(a+" " +b);

}

}

**7.SWAPING OF 2 VALUES WITH BITWISE OPERATOR :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** swapwithbitwise {

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

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

**int** a = sc.nextInt();

**int** b = sc.nextInt();

a=a^b;

b=a^b;

a=a^b;

System.***out***.println(a+" " +b);

}

}

**8.TYPE CASTING :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** typecasting {

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

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

**short** a = sc.nextShort();

**float** b = a;

**double** c = sc.nextDouble();

**int** d = (**int**)c;

System.***out***.println("Ascending (implicit / widening ):"+b);

System.***out***.println("Descending (explicit / narrowing ):"+d);

}

}

**9.FIND BYTES :**

**package** javaproject;

**public** **class** findbyte {

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

System.***out***.println("Byte :"+Byte.***BYTES***);

System.***out***.println("Short :"+Short.***BYTES***);

System.***out***.println("Int :"+Integer.***BYTES***);

System.***out***.println("Long :"+Long.***BYTES***);

System.***out***.println("Float :"+Float.***BYTES***);

System.***out***.println("Double :"+Double.***BYTES***);

System.***out***.println("Character :"+Character.***BYTES***);

}

}

**10.ASCII TO CHAR AND VICE VERSA :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** ascivalue {

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

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

**char** a = sc.next().charAt(0);

**int** b = (**int**)a;

**int** c = sc.nextInt();

**char** d = (**char**)c;

System.***out***.println("CHAR TO ASCII :"+b);

System.***out***.println("ASCII TO CHAR :"+d);

}

}

**CONDITIONAL STATEMENTS :**

**IF ELSE :**

**11. GREATER NUMBER :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** congreater {

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

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

**int** a = sc.nextInt();

**int** b = sc.nextInt();

**if**(a>b) {

System.***out***.println("A is greater");

}

**else** {

System.***out***.println("B is greater");

}

}

}

**12.POSITIVE OR NEGATIVE :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** conpositiveorneg {

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

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

**int** a = sc.nextInt();

**if**(a>0) {

System.***out***.println("A is a positive number.");

}

**else** {

System.***out***.println("A is negative number.");

}

}

}

**13.EVEN OR ODD :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** conoddeven {

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

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

**int** a = sc.nextInt();

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

System.***out***.println("A is a even number.");

}

**else** {

System.***out***.println("A is odd number.");

}

}

}

**14.MULTIPLES OF 3 AND 2 :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** conmul {

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

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

**int** a = sc.nextInt();

**if**(a%2==0 && a%3==0) {

System.***out***.println("A is divisible by 2 and 3.");

}

**else** {

System.***out***.println("A is not divisible by 2 and 3.");

}

}

}

**15. 3 DIGIT NUMBER OR NOT :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** con3dig {

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

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

**int** a = sc.nextInt();

**if**(a>99 && a<1000) {

System.***out***.println("A is 3 digit number.");

}

**else** {

System.***out***.println("A is not 3 digit number.");

}

}

}

**ELSE IF :**

**16.WHICH IS GREATER AMONG 3:**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** elseifgreater {

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

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

**int** a = sc.nextInt();

**int** b = sc.nextInt();

**int** c = sc.nextInt();

**if**(a>b && a>c) {

System.***out***.println("A is greater");

}

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

System.***out***.println("B is greater");

}

**else** {

System.***out***.println("C is greater");

}

}

}

**17.POSITIVE , NEGATIVE OR ZERO :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** elseifposneg0 {

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

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

**int** a = sc.nextInt();

**if**(a>0) {

System.***out***.println("A is a positive number.");

}

**else** **if**(a<0) {

System.***out***.println("A is negative number.");

}

**else** {

System.***out***.println("A is Zero");

}

}

}

**NESTED IF :**

**18.HEIGTH AND AGE VERIFICATION :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** nestedif {

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

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

System.***out***.println("Enter age :");

**int** age = sc.nextInt();

System.***out***.println("Enter heigth :");

**int** heigth = sc.nextInt();

**if**(age>=18) {

**if**(heigth>=160) {

System.***out***.println("Age and Height is enough");

}

**else** {

System.***out***.println("Height is not enough");

}

}

**else** {

System.***out***.println("Age is not enough");

}

}

}

**SWITCH CASE :**

**19.FIND THE DAY :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** switchdays {

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

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

**int** day = sc.nextInt();

**switch**(day) {

**case** 1:

{

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

**break**;

}

**case** 2:

{

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

**break**;

}

**case** 3:

{

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

**break**;

}

**case** 4:

{

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

**break**;

}

**case** 5:

{

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

**break**;

}

**case** 6:

{

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

**break**;

}

**case** 7:

{

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

**break**;

}

**default**:{

System.***out***.println("Enter the valid input .");

**break**;

}

}

}

}

**20.FIND THE MONTH :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** switchmonth {

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

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

String month = sc.next();

**switch**(month) {

**case** "January":

{

System.***out***.println("Its January . It has 31 days.");

**break**;

}

**case** "February":

{

System.***out***.println("Its February . It has 28 or 29 days.");

**break**;

}

**case** "March":

{

System.***out***.println("Its March . It has 31 days.");

**break**;

}

**case** "April":

{

System.***out***.println("Its April . It has 30 days.");

**break**;

}

**case** "May":

{

System.***out***.println("Its May . It has 31 days.");

**break**;

}

**case** "June":

{

System.***out***.println("Its June . It has 30 days.");

**break**;

}

**case** "July":

{

System.***out***.println("Its July . It has 31 days.");

**break**;

}

**case** "August":

{

System.***out***.println("Its August . It has 31 days.");

**break**;

}

**case** "September":

{

System.***out***.println("Its September . It has 30 days.");

**break**;

}

**case** "October":

{

System.***out***.println("Its October . It has 31 days.");

**break**;

}

**case** "November":

{

System.***out***.println("Its november . It has 30 days.");

**break**;

}

**case** "December":

{

System.***out***.println("Its December . It has 31 days.");

**break**;

}

**default**:

{

System.***out***.println("Enter the valid input");

**break**;

}

}

}

}

**21. WRITE THE PROGRAM TO CALCULATE THE EB BILL;**

**FOR 1st 50 UNITS : Rs 0.50 / UNIT -----> ( 0-50 UNITS)**

**FOR NEXT 100 UNITS : Rs 0.75 / UNIT -----> ( 51-150 UNITS)**

**FOR NEXT 100 UNITS : Rs 1.20 / UNIT -----> ( 151-250 UNITS)**

**FOR NEXT 100 UNITS : Rs 1.50 / UNIT -----> ( Above 250 UNITS)**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** switcheb {

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

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

**int** unit = sc.nextInt();

**float** bill =0;

**if**(unit >0 && unit <=50) {

bill = unit\*0.50f;

}

**else** **if**(unit>50 && unit <=150) {

bill = 50\*0.50f + (unit-50)\*0.75f;

}

**else** **if**(unit>150 && unit<=250) {

bill = 50\*0.50f + 100\*0.75f+(unit - 150)\*1.20f;

}

**else** {

bill = 50\*0.50f + 100\*0.75f+100\*1.20f+(unit - 250)\*1.50f;

}

bill += bill\*0.2f;

System.***out***.println("FINAL BILL : "+bill);

}

}

**FOR LOOP :**

**22. NATURAL NUMBER :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** fornatural {

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

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

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

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

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

}

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

**for**(**int** i =n ; i>0;i--) {

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

}

}

}

**23. ODD OR EVEN :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** forodd {

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

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

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

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

**for**(**int** i =1 ; i<=n;i=i+2) {

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

}

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

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

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

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

}

}

}

**24. FACTORIAL:**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** forfact {

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

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

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

**int** fact = 1;

**for**(**int** i = 2 ;i<=n;i++) {

fact \*=i;

}

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

}

}

**25. SUM OF EVEN :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** sumofeven {

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

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

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

**int** sum = 0;

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

sum+=i;

}

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

}

}

**26. MULTIPLICATION TABLES :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** fortables {

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

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

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

**for**(**int** i = 1;i<=10;i++) {

System.***out***.println(n+" \* "+i+" = "+i\*n);

}

}

}

**27.FIBONOIC SERIES :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** forfibonoic {

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

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

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

**int** first =0,second = 1;

**for**(**int** i = 2; i<=n;i++) {

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

**int** third = first+second;

first = second;

second = third ;

}

}

}

**28. PALINDROM NUMBER:**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** forpalindrome {

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

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

**int** num = sc.nextInt();

**int** temp = num;

**int** rev = 0;

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

**int** d = num%10;

rev = rev\*10+d;

num/=10;

}

**if**(temp == rev) {

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

}

**else** {

System.***out***.println("Not Palindrome ");

}

}

}

**29.PALINDROME STRING :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** forpalindromestring {

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

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

String s = sc.nextLine();

String s1= s;

String rev = " ";

**int** n = s.length();

**for**(**int** i =n-1;i>=0;i--) {

rev+=s.charAt(i);

}

**if**(s1.equals(rev)) {

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

}

**else** {

System.***out***.println("Not Palindrome ");

}

}

}

**WHILE LOOP :**

**30 . NUMBER TILL N :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** whiletill {

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

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

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

**int** i =0 ;

**while**(i<=n) {

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

i++;

}

}

}

**31.COUNT DIGIT :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** whilecountdigit {

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

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

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

**int** count =0;

n = Math.*abs*(n);

**if**(n == 0) count =1;

**else** {

**while**(n>0) {

n = n/10;

count++;

}

}

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

}

}

**32.GCD :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** WHILEGCD {

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

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

**int** n1 = sc.nextInt();

**int** n2 = sc.nextInt();

n1 = Math.*abs*(n1);

n2 = Math.*abs*(n2);

**while**(n2!=0) {

**int** temp = n2;

n2 = n1%n2;

n1 = temp;

}

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

}

}

**DO WHILE :**

**33. NUMBER TILL N :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** dotill {

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

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

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

**int** i = 1;

**do** {

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

i++;

}**while**(i<=n);

}

}

**34.EVEN NUMBER :**

**package** javaproject;

**import** java.util.Scanner;

**public** **class** doeven {

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

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

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

**int** i = 0;

**do** {

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

i+=2;

}**while**(i<=n);

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

**int** j = n;

**do** {

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

j-=2;

}**while**(j>=0); } }