**Number Programs**

**RENUKA. M**RRR

1)WAJP To Print Even Number Between The Range

**public** **class** EvenNumberRange {

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

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

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

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

}

}

}

}

**O/P:**

**2**

**4**

**6**

**8**

**10**

1. WAJP To Find Sum Of First 10 Even Number?

**public** **class** SumOfEvenNumber {

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

**int** sum=0;

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

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

sum=sum+i;

}

}

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

}

}

**O/P:30**

3)WAJP To Print Odd Number Between The Range

**public** **class** OddNumberRange {

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

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

**if**(i%2==1) {

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

}

}

}

}

**O/P:**

**1**

**3**

**5**

**7**

**9**

1. WAJP To Find Sum Of First 10 Odd Number?

**public** **class** SumOfEvenNumber {

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

**int** sum=0;

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

**if**(i%2==1) {

sum=sum+i;

}

}

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

}

}

**O/P:25**

1. WAJP For Swapping Of Two Number Using Temp Variable?

**public** **class** SwapNumber {

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

**int** a=10,b=20;

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

System.***out***.println("Value of a is: "+a);

System.***out***.println("Value of b is: "+b);

**int** temp=a;

a=b;

b=temp;

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

System.***out***.println("Value of a is: "+a);

System.***out***.println("Value of b is: "+b);

}

}

**O/P:**

**Before Swapping**

**Value of a is: 10**

**Value of b is: 20**

**After Swapping**

**Value of a is: 20**

**Value of b is: 10**

1. WAJP For Swapping Of Two Number Without Using Temp Variable?

**public** **class** SwapWithoutTemp {

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

**int** a=10,b=20;

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

System.***out***.println("Value of a is: "+a);

System.***out***.println("Value of b is: "+b);

a=a+b;

b=a-b;

a=a-b;

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

System.***out***.println("Value of a is: "+a);

System.***out***.println("Value of b is: "+b);

}

}

**O/P:**

**Before Swapping**

**Value of a is: 1**

**Value of b is: 2**

**After Swapping**

**Value of a is: 2**

**Value of b is: 1**

7)WAJP To Find Gretest Of Three Number Using Ternary Operator?

**public** **class** TernaryCondition {

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

**int** a=10,b=20,c=30;

**int** res= a>b ? (a>c?a:c) : (b>c?b:c);

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

}

}

**O/P:30**

8)WAJP Print ‘A’ TO ‘Z’ ASCII Value

**public** **class** PrintASCII {

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

**for**(**int** i='A';i<='Z';i++) {

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

}

}

}

**O/P:**

1. WAJP Print Multiplication Table For 11 ?

**public** **class** MultiplicationTable {

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

**int** n=11;

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

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

}

}

}

**O/P:**

11\*1=11

11\*2=22

11\*3=33

11\*4=44

11\*5=55

11\*6=66

11\*7=77

11\*8=88

11\*9=99

11\*10=110

10)WAJP To Extract Last Digit In Given Number

**public** **class** ExtracLastDigit {

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

**int** n=23456;

System.***out***.println(n%10);

}

}

**O/P:65 to 90**

11)WAJP To Remove Last Digit In Given Number

**public** **class** RemoveLastDigit {

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

**int** n=1235;

System.***out***.println(n/10);

}

**O/P:**

**1234**

12)WAJP To Count Number of Digit In Give Number

**public** **class** CountNoOfDigit {

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

**int** n=2341,c=0;

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

c++;

n=n/10;

}

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

}

}

**O/P:**

**4**

13)WAJP To Check Given Number Starts With Even or Odd?

**public** **class** Number\_Starts\_wt\_EvenOrOdd {

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

**int** n=1234;

**while**(n>9) {

n=n/10;

}

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

System.***out***.println("Number starts With even");

}

**else** {

System.***out***.println("Number starts with odd");

}

}

}

**O/P:**Number starts with odd

14)WAJP To Find Sum Of Each Digit In Give Number?

**public** **class** Sum\_Of\_Each\_Digit {

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

**int** n=12345;

**int** sum=0;

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

**int** rem=n%10;

sum+=rem;

n=n/10;

}

System.***out***.println("Sum of digit is: "+sum);

}

}

**O/P:**Sum of digit is: 15

15)WAJP To Find Product Of Each Digit In Give Number

**public** **class** Product\_of\_Each\_Digit {

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

**int** n =1234,pro=1;

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

**int** rem=n%10;

pro\*=rem;

n=n/10;

}

System.***out***.println("Product of digits is: "+pro);

}

}

**O/P:**Product of digits is: 24

16)WAJP To Find Reverse Of Give Number

**public** **class** ReverseANumber {

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

**int** n=12345,rev=0;

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

rev=(rev\*10)+n%10;

n=n/10;

}

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

}

}

**O/P:**Reverse of Number is: 54321

17)WAJP To Find Given Number Is Palindrome or Not

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

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

**int** n=121,n1=n,rev=0;

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

**int** rem=n%10;

rev=(rev\*10)+rem;

n=n/10;

}

**if**(rev==n1)

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

**else**

System.***out***.println("Not a palindrome");

}

}

**O/P:**Palindrome

18)WAJP To Find Factors Of A Given Number

**public** **class** Factors {

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

**int** n=10;

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

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

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

}

}

}

}

**O/P:**

19)WAJP To Find Sum Of Factors Of Given Number

**public** **class** Factors {

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

**int** n=10;

System.***out***.println("Factors of given no.is ");

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

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

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

}

}

}

}

**O/P:**Factors of given no.is

1

2

5

10

20)WAJP To Find Product Of Factors Of Given Number

**public** **class** Product\_of\_Factors {

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

**int** n=6,pro=1;

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

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

pro\*=i;

}

}

System.***out***.println("Product of factors is: "+pro);

}

}

**O/P:**Product of factors is: 36

21)WAJP To Check Given Number Is Perfect Number or Not

**public** **class** PerfectNumber {

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

// A number whose sum of factors except that no. is equal to given no .

**int** n=6,sum=0;

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

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

sum+=i;

}

}

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

**if**(n==sum) {

System.***out***.println("perfect no");

}

**else**

System.***out***.println("not a perfect no");

}

}

**O/P:**Given is Perfect no

22)WAJP To Check Given Number Is Prime Number or Not

**public** **class** Prime\_Or\_Not {

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

**int** n=11,c=0;

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

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

c++;

}

}

**if**(c==2) {

System.***out***.println("Given Number is Prime Number");

}

**else** {

System.***out***.println("Given Number is Not Prime Number");

}

}

}

**O/P:**Given Number is Prime Number

23)WAJP To Print Prime Number Between The Rang?

**public** **class** Prime\_Range {

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

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

**int** c=0;

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

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

c++;

}

}

**if**(c==2) {

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

}

}

}

}

**O/P:**

2

3

5

7

1. WAJP To Check Given Number Is Composite Number or Not

**public** **class** Composite\_Or\_Not {

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

**int** n=12,c=0;

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

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

c++;

}

}

**if**(c>2) {

System.***out***.println("Given number is Composite");

}

**else** {

System.***out***.println("Given number is not a composite");

}

}

}

**O/P:**Given number is Composite

25)WAJP To Print Composite Number Between The Rang

**public** **class** CompositeNumber {

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

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

**int** c=0;

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

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

c++;

}

}

**if**(c>2) {

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

}

}

}

}

**O/P:**4,6,8,9,10

26)WAJP To Find The Factorial Of Given Number

**public** **class** Factorial {

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

**int** n=5,fact=1;

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

fact=fact\*i;

}

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

}

}

**O/P:**120

27)WAJP To Find The Sum Of Factorial Of Given Number ?

**public** **class** SumOfFactorial {

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

**int** n=145,sum=0;

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

**int** rem=n%10;

**int** fact=1;

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

fact\*=i;

}

System.***out***.println(rem+"--> factorial is:"+fact);

sum=sum+fact;

n=n/10;

}

System.***out***.println("Sum of all factorial is:"+sum);

}

}

**O/P:**5--> factorial is:120

4--> factorial is:24

1--> factorial is:1

Sum of all factorial is:145

28)WAJP To Check Given Number Is Strong Number or Not?

**class** StrongNumber {

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

//sum of factorial of each digit is equal to given number

**int** n=145,n1=n,sum=0;

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

**int** rem=n%10;

**int** fact=1;

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

fact=fact\*i;

}

sum+=fact;

n=n/10;

}

**if**(sum==n1) {

System.***out***.println("Given Number is Strong number");

}

**else**

System.***out***.println("Given Number is not a Strong number");

}

}

**O/P:**Given Number is Strong number

29)WAJP To Check Given Number Is Armstrong Number or Not?

**public** **class** ArmstrongNumber {

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

//sum of power of each digit is equal to given number

**int** n=153,n1=n,c=0,n2=n;

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

n=n/10;

c++;

}

**int** sum=0;

**while**(n1!=0) {

**int** rem=n1%10;

**int** pow=1;

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

pow=pow\*rem;

}

sum=sum+pow;

n1=n1/10;

}

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

**if**(sum==n2)

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

**else**

System.***out***.println("Not a Armstrong no");

}

}

**O/P:**153

Armstrong Number

30)WAJP To Find Gretest Common Digit(GCD) of 2 Number?

**public** **class** GCD {

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

**int** n1=8,n2=12,gcd=0;

**for**(**int** i=1;i<=n1/2 && i<=n2/2;i++) {

**if**(n1%i==0 && n2%i==0) {

gcd=i;

}

}

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

}

}

**O/P:**4

31)WAJP To Print Fibonacci Series Between The Range?

**public** **class** Fibonacci\_series\_range {

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

**int** n1=0,n2=1,n3,st=5,en=50;

**for**(**int** i=st;i<=en;i++) {

**if**(n1>=st&&n1<=en) {

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

}

n3=n1+n2;

n1=n2;

n2=n3;

}

}

}

**O/P:**5

8

13

21

34

32)WAJP To Find Nth Fibonacci?

**public** **class** NthFibanacci {

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

**int** n1=0,n2=1,n3=0;

**int** target=4 ;

**for**(**int** i=1;i<target;i++)

{

n3=n1+n2;

n1=n2;

n2=n3;

}

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

}

}

**O/P:**2

33)WAJP To Find The SquareRoot Of Given Number?

**public** **class** SquareRoot {

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

**int** n=16;

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

**if**(n==i\*i) {

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

}

}

}

}

**O/P:**4

34)WAJP To Check Given Number Is Sunny Number or Not?

**public** **class** SunnyNumber {

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

//Number next to the given number is perfect square

//int n=8 find the next number, add 1 to the given number

// n1=n+1; n1=9 9==3\*3

**int** n=8;

**int** n1=n+1; **boolean** flag=**false**;

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

**if**(n1==i\*i) {

flag=**true**;

**break**;

}

}

**if**(flag==**true**) {

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

}

**else** {

System.***out***.println("Not a Sunny Number");

}

}

}

**O/P:**Sunny Number

35)WAJP To Check Given Number Is Neon Number or Not?

**public** **class** NeonNumber {

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

//A neon number is a number where the sum of digits of the square of the number

//is equal to the number.

//Let's take an example. n = 9.

//square = 81. sum of digits of square = 8 + 1 = 9.

**int** n=9,sq=n\*n,sum=0;

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

**int** rem=sq%10;

sum=sum+rem;

sq=sq/10;

}

**if**(sum==n) {

System.***out***.println(n+" is Neon Number");

}

**else** {

System.***out***.println(n+" is Not a neon number");

}

}

}

**O/P:**9 is Neon Number

36)WAJP To Check Given Number Is Xylem or Phloem ?

**public** **class** XylemOrPhloem {

//Outer sum is equal to inner Sum

// 1234 ->1+4=5 and 2+3=5

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

**int** n=1234 ,is=0;

**int** last=n%10; n=n/10;

**while**(n>9) {

**int** rem=n%10;

is=is+rem;

n=n/10;

}

**int** os=last+n;

**if**(is==os) {

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

}

**else** {

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

}

}

}

**O/P:**Xylem

37)WAJP To Check Given Number Is Happy Number or Not?

**public** **class** HappyNumber {

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

**int** n=13 ;

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

**int** sum=0;

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

**int** rem=n%10;

**int** sq=rem\*rem;

sum =sum+sq; ;

n=n/10;

}

**if**(sum==1) {

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

**break**;

}

**else** **if**(sum==4) {

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

**break**;

}

n=sum;

}

}

}

**O/P:**Happy number

38)WAJP To Check Given Number Is Automorphic Number or Not?

**public** **class** Automorphic {

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

//1)25->625 2)6->36

**int** n=6,sq=n\*n;

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

**int** r1=n%10;

**int** r2=sq%10;

**if**(r1==r2) {

n=n/10;

sq=sq/10;

}

**else** {

**break**;

}

}

**if**(n==0)

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

**else**

System.***out***.println("Not a Automorphic");

}

}

**O/P:**Automorphic

39)WAJP To Check Given Number Is Tech Number or Not?

**public** **class** TechNumber {

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

// 2025 ->count digit ->count even->dived 2 parts 20|25

//sum first part and last part ->square the sum check that square is

//equal to given number or not

**int** n=2025,n1=n,c=0;

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

n=n/10;

c++;

}

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

**int** d=1;

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

d=d\*10;

}

**int** last=n1%d;

**int** first=n1/d;

**int** sum=first+last;

**int** sq=sum\*sum;

**if**(sq==n1) {

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

}

**else** {

System.***out***.println("Not a Tech Number");

}

}

**else** {

System.***out***.println("Not a Tech Number");

}

}

}

**O/P:**Tech Number

40)WAJP To Check Given Number Is Buzz Number or Not?

**public** **class** BuzzNumber {

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

**int** n=123457;

**if**(n%7==0|| n%10==7) {

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

}

**else** {

System.***out***.println("Not a Buzz Number");

}

}

}

**O/P:**BuzzNumber

41)WAJP To Find Given Number Is Even or Not Without Using %?

**public** **class** EvenNumberWithoutModulus {

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

**int** n1=12;

**if**((n1/2)\*2==n1) {

System.***out***.println("even no");

}

**else** {

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

}

}

}

**O/P:**even no

42)WAJP To Find Given Number Is Duck Number or Not?

**public** **class** DuckNumber {

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

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

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

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

**int** n1=n;

**int** n2=n;

**int** c=0;

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

c++;

n=n/10;

}

**int** p=1;

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

p=p\*10;

}

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

**int** d=n1/p;

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

**if**(d==0) {

System.***err***.println("number does not contains starting zero");

}

**else** {

**int** flag=0;

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

**int** rem=n2%10;

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

flag=1;

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

**break**;

}

n2=n2/10;

}

**if**(flag==0) {

System.***out***.println("Not a duck number");

}

}

}

}

**O/P:**enter number

1203

Duck Number

43)WAJP To Find Maximum Digit In Given Number?

**public** **class** MaximumDigit {

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

**int** n=87965;

**int** max=Integer.***MIN\_VALUE***;

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

**int** rem=n%10;

**if**(rem>max) {

max=rem;

}

n=n/10;

}

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

}

}

**O/P:**9

44)WAJP To Find Minimum Digit In Given Number?

**public** **class** MinimumDigit {

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

**int** n=9615;

**int** min=Integer.***MAX\_VALUE***;

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

**int** rem=n%10;

**if**(rem<min) {

min=rem;

}

n=n/10;

}

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

}

}

**O/P:**1

45)WAJP To Find Prime Digit In Given Number?

**public** **class** PrimeDigit {

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

**int** n=234;

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

**int** rem=n%10;

**int** c=0;

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

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

c++;

}

}

**if**(c==2) {

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

}

n=n/10;

}

}

}

**O/P:**3

2