```
 1)maximum between 2 numbers
public class Main{
public static void main(String[] args){
int num1=45;
int num2=54;
if(num1>num2){
System.out.println("num1 is  max");
}else{
System.out.println("num2 is  max");
}}}

user input
// 1)maximum between 2 numbers
import java.util.Scanner;
public class Main{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);

System.out.println("enter num1");
int num1=sc.nextInt();
System.out.println("enter num2");
int num2=sc.nextInt();

if(num1>num2){
System.out.println("num1 is  max");
}else{
System.out.println("num2 is  max");
}}}
--------------------------------------------------------------------------------
------
// 2)maximum between 3 numbers
import java.util.Scanner;
public class Main{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);

System.out.println("enter num1");
int num1=sc.nextInt();
System.out.println("enter num2");
int num2=sc.nextInt();
System.out.println("enter num3");
int num3=sc.nextInt();
if(num1>num2&&num1>num3){
System.out.println("num1 is  max");
}else if(num2>num1&&num2>num3){
System.out.println("num2 is  max");
}else{
   System.out.println("num3 is  max");
}
}}
```

```
--------------------------------------------------------------------------------
-----
// 3. Write a JAVAprogram to check whether a number is negative, positive or zero.

import java.util.Scanner;
public class Main{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);

System.out.println("enter num1");
int num1=sc.nextInt();

if(num1>0){
System.out.println("num is +ve");
}else if(num1<0){
System.out.println("num1 is -ve");
}else{
   System.out.println("num1 is zero");
}
}}
--------------------------------------------------------------------------

// 4. Write a JAVAprogram to check whether a number is divisible by 5 and 11 or not.

import java.util.Scanner;
public class Main{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);

System.out.println("enter num1");
int num1=sc.nextInt();

if(num1%5==0){
System.out.println("div by 5");
}else if(num1%11==0){
System.out.println("div by 11");
}else{
   System.out.println("not div");
}
}}
--------------------------------------------------------------------------------
-----

// 5. Write a JAVAprogram to check whether a number is even or odd.
import java.util.Scanner;
public class Main{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);

System.out.println("enter num1");
```

```
int num1=sc.nextInt();

if(num1%2==0){
System.out.println("even");

}else{
   System.out.println("odd");
}
}}
--------------------------------------------------------------------------------
----

// 6. Write a JAVAprogram to check whether leap year or not.
import java.util.Scanner;
public class Main{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);

System.out.println("enter year");
int year=sc.nextInt();

if(year%4==0&&year%100!=0){ //year%400==0
System.out.println("leap");

}else{
   System.out.println("not");
}
}}
--------------------------------------------------------------------------------
-------
// 7. Write a JAVAprogram to check whether a character is alphabet or not.
import java.util.Scanner;
public class Main{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);

System.out.println("enter alphabet");
char ch=sc.next().charAt(0);

if(ch>='a'&& ch<='z' || ch>='A'&& ch<='Z'){
System.out.println("alphabet");

}else{
   System.out.println("not");
}
}}
------------------------------------------------------------------------
// 8. Write a JAVAprogram to input any alphabet and check whether it is vowel or
consonant.
import java.util.Scanner;
```

```
public class Main{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);

System.out.println("enter alphabet");
char ch=sc.next().charAt(0);

if(ch == 'a'|| ch == 'e'|| ch == 'i'||ch == 'o'||ch == 'u'){
System.out.println("vowel");

}else{
   System.out.println("consonants");
}
}}
```

```
// 9. Write a JAVAprogram to input any character and check whether it is alphabet,
digit or special character.
import java.util.Scanner;
public class Main{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);

System.out.println("enter alphabet");
char ch=sc.next().charAt(0);

if(ch>='a'&&ch<='z'){
System.out.println("alphabetss");

}else if(ch>=0&&ch<=9){
   System.out.println("digits");
}else{
   System.out.println("spls char");
}
}}
```

```
//10. Write a JAVAprogram to check whether a character is uppercase or lowercase
alphabet.

import java.util.Scanner;
public class Main{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);

System.out.println("enter alphabet");
char ch=sc.next().charAt(0);

if(ch>='a'&&ch<='z'){
System.out.println("lower case");
```

```
}else{
   System.out.println("upper case");
}
}}
-------------------------------------------------------------------------------
--
//49. Write a JAVAprogram to print Fibonacci series up to n terms
import java.util.Scanner;
public class Main{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);
int term,a=0,b=1,c;
System.out.println("enter term");
term =sc.nextInt();
for(int i=1;i<=term;i++){
 System.out.println(a+" ");

c=a+b;
a=b;
b=c;
}}}
-----------------------------------------------------------------
//. Write a JAVAprogram to print all armStrong numbers or not
import java.util.Scanner;
public class Main{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);
int n,rem,arm=0,c;
System.out.println("enter term");
n =sc.nextInt();
c=n;
while(n>0){
    rem=n%10;
    arm=(rem*rem*rem)+arm;
    n=n/10;
}
if(c==arm){
    System.out.println("armstrong number");
}
else{
   System.out.println("not armstrong number");
}
}}
-------------------------------------
//44. Write a JAVAprogram to print all Armstrong numbers between 1 to n.
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
```

```
        int n, rem, arm;
        System.out.println("Enter term: ");
        n = sc.nextInt();
        System.out.println("Armstrong numbers between 1 and " + n + ":");

        for (int i = 1; i <= n; i++) {
            arm = 0;
            int c = i;
            while (c > 0) {
                rem = c % 10;
                arm = arm + (rem * rem * rem);
                c = c / 10;
            }
            if (i == arm) {
                System.out.println(i);
            }
        }
    }
}
```


//39. Write a JAVAprogram to check whether a number is Prime number or not.

```
import java.util.Scanner;
public class Main{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);
 int n;
System.out.println("enter term");
 n=sc.nextInt();
int count=0;
for(int i=1;i<=n;i++){
if(n%i==0){
    count++;

}
}
if(count==2){
    System.out.println("prime");
}else{
    System.out.println(" not prime");
}
}}
```


//40. Write a JAVAprogram to print all Prime numbers between 1 to n.

```
import java.util.Scanner;
```

```
public class Main{
public static void main(String[] args){
    Scanner sc=new Scanner(System.in);
 int n;
System.out.println("enter term");
 n=sc.nextInt();
for(int i=2;i<=n;i++){
    int count=0;
    for(int j=2;j<i;j++){
        if(i%j==0){
            count++;
        }
    }
    if(count==0){
        System.out.println(i+" ");
    }
}}}
```

```
//41. Write a JAVAprogram to find sum of all prime numbers between 1 to n.
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n;
        System.out.println("Enter term: ");
        n = sc.nextInt();
        int sum = 0;

        for (int i = 2; i <= n; i++) {
            int count = 0;
            for (int j = 2; j < i; j++) {
                if (i % j == 0) {
                    count++;
                }
            }
            if (count == 0) {
                sum += i;
            }
        }

        System.out.println("Sum of prime numbers up to " + n + ": " + sum);
    }
}
```

```
//45. Write a JAVAprogram to check whether a number is Perfect number or not.
import java.util.Scanner;
```

```
public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n ,sum=0;
        System.out.println("Enter term: ");
        n = sc.nextInt();
    for(int i=1;i<n;i++){
        if(n%i==0){
            sum=sum+i;
        }
    }
    if(n==sum){
        System.out.println("perfect num");
    }else{
          System.out.println(" not perfect num");
    }
    }
}
```

```
//46. Write a JAVAprogram to print all Perfect numbers between 1 to n.

import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n;
        System.out.println("Enter term: ");
        n = sc.nextInt();
        System.out.println("Perfect numbers between 1 and " + n + ":");

        for (int num = 1; num <= n; num++) {
            int sum = 0;
            for (int i = 1; i < num; i++) {
                if (num % i == 0) {
                    sum += i;
                }
            }
            if (num == sum) {
                System.out.println(num);
            }
        }
    }
}
```

```
//17. Write a JAVAprogram to print all natural numbers from 1 to n. - using while
loop
import java.util.Scanner;
public class Main{
public static void main(String args[]){
```

```
 Scanner sc = new Scanner(System.in);
 System.out.print("Enter n values ");
  int n = sc.nextInt();
int i=1;
 while (i <= n) {
  System.out.println(i);
    i++;
}}}
```

```
//18. Write a JAVAprogram to print all natural numbers in reverse (from n to 1). -
using while loop
import java.util.Scanner;
public class Main{
public static void main(String args[]){
 Scanner sc = new Scanner(System.in);
 System.out.print("Enter n values ");
  int n = sc.nextInt();
int i=n;
 while (i >= 1) {
  System.out.println(i);
    i--;
}}}
```

```
//19. Write a JAVAprogram to print all alphabets from a to z. - using while loop
import java.util.Scanner;
public class Main{
public static void main(String args[]){
 Scanner sc = new Scanner(System.in);
char ch='a';
while (ch <= 'z') {
 System.out.print(ch + " ");
            ch++;
}}}
```

```
//20. Write a JAVAprogram to print all even numbers between 1 to 100. - using while
loop
import java.util.Scanner;
public class Main{
public static void main(String args[]){
 Scanner sc = new Scanner(System.in);
int num = 1;
 while (num <= 100) {
if (num % 2 == 0) {
 System.out.println(num);
            }
 num++;
        }
    }
}
```

```
//21. Write a JAVAprogram to print all odd number between 1 to 100.
import java.util.Scanner;
public class Main{
public static void main(String args[]){
 Scanner sc = new Scanner(System.in);
int num = 1;
 while (num <= 100) {
if (num % 2 != 0) {
 System.out.println(num);
            }
 num++;
        }
    }
}
-----------------------------------------------------
//22. Write a JAVAprogram to find sum of all natural numbers between 1 to n.
import java.util.Scanner;
public class Main{
public static void main(String args[]){
 Scanner sc = new Scanner(System.in);
 System.out.print("Enter n values ");
  int n = sc.nextInt();
int sum = 0;
 int i = 1;
 while (i <= n) {
  sum =sum+ i;
  i++;
}
    System.out.println("sum is"+sum);
}}
-------------------------------------------------------------------------------
//23. Write a JAVAprogram to find sum of all even numbers between 1 to n.
import java.util.Scanner;
public class Main{
public static void main(String args[]){
 Scanner sc = new Scanner(System.in);
 System.out.print("Enter n values ");
  int n = sc.nextInt();
int sum=0;
int i=1;
 while (i <= n) {
 if (number % 2 == 0) {
sum=sum+i;
i++;
}
  System.out.println(i);

}}}
-------------------------------------------------
//24.Write a JAVAprogram to find sum of all odd numbers between 1 to n.
```

```
import java.util.Scanner;
public class Main{
public static void main(String args[]){
 Scanner sc = new Scanner(System.in);
 System.out.print("Enter n values ");
  int n = sc.nextInt();
int sum=0;
int i=1;
 while (i <= n) {
 if (number % 2 != 0) {
sum=sum+i;
i++;
}
  System.out.println(i);

}}
-----------------------------------------------------
//25. Write a JAVAprogram to print multiplication table of any number.
import java.util.Scanner;
public class Main{
public static void main(String args[]){
 Scanner sc = new Scanner(System.in);
 System.out.print("Enter n values ");
  int n = sc.nextInt();
   int i = 1;
    while (i <= 10) {
     int mul= n * i;
    System.out.println(n + " x " + i + " = " + mul);
            i++;
        }
}}
-----------------------------------------------------
//26. Write a JAVAprogram to count number of digits in a number.
import java.util.Scanner;
public class Main {
 public static void main(String[] args) {
 int count = 0, num = 586;
 while (num != 0) {
      num =num/ 10;
      count++;
    }

    System.out.println("Number of digits " + count);
  }
}
-----------------------------------------------------
//27. Write a JAVAprogram to find first and last digit of a number.


import java.util.Scanner;
```

```
public class Main{
public static void main(String args[]){
 Scanner sc = new Scanner(System.in);
 System.out.print("Enter n values ");
  int n = sc.nextInt();
int first= 0;
 int last = n % 10;
 while (n != 0) {
    first = n;
   n=n/ 10;
        }

        System.out.println("First " + first);
        System.out.println("Last " + last);
}}
-------------------------------------------------
//28. Write a JAVAprogram to find sum of first and last digit of a number.
import java.util.Scanner;
public class Main{
public static void main(String args[]){
 Scanner sc = new Scanner(System.in);
 System.out.print("Enter n values ");
  int n = sc.nextInt();
int first= 0;
 int last = n % 10;
 while (n != 0) {
    first = n;
   n=n/ 10;
          }
 int sum = first + last;

        System.out.println("Sum of first and last digit is" + sum);
}}
-------------------------------------------------------------------------------
//29. Write a JAVAprogram to check whether a number is palindrome or not.
public class Main
 {
   public static void main (String args[])
   {
  int num = 12021,
int reverse = 0, rem, temp;
 temp = num;
 while (temp != 0)
       {
        rem = temp % 10;
        reverse = reverse * 10 + rem;
        temp=temp/ 10;
       };
     if (num == reverse)
       System.out.println (num + " is Palindrome");
```

```
     else
       System.out.println (num + " is not Palindrome");
   }
 }
-----------------------------------------------------------------
//30.Write a JAVAprogram to count number  sum of digits in a number.
import java.util.Scanner;
public class Main {
 public static void main(String[] args) {
 int count = 0, num = 586;
 while (num != 0) {
      num =num/ 10;
sum=sum+num;
      count++;
    }

    System.out.println("Number of digits " + count);
  }
}

-------------------------------------------------------------------------------
-------
//32. Write a JAVAprogram to enter a number and print its reverse.

import java.util.Scanner;
public class Main{
public static void main(String args[]){
 Scanner sc = new Scanner(System.in);
 System.out.print("Enter n values ");
  int number = sc.nextInt();
  int reverse = 0;
while (number != 0) {
  int digit = number % 10;
  reverse = reverse * 10 + digit;
    number /= 10;
        }
System.out.println("reverse"+reverse);
}}
-----------------------------------------------------
////product ofa digit of a number using for loop
import java.util.Scanner;
  class ForProduct{
    public static void main(String args[]){
      Scanner sc=new Scanner(System.in);
        int n,product=1;
         System.out.println("enter the number");
        n=sc.nextInt();
        while(n!=0)
        {
        product=product*(n%10);
```

```
        n=n/10;
        }
        System.out.println("product is"+product);
}
-----------------------------------------------------


////import java.util.*;
  class ElectricityBill{
  public static void main(String args[]) {
    int unit;
    double amount, total_amount, charge_amount;
    Scanner sc = new Scanner(System.in);
    System.out.print("Enter a number: ");
    unit = sc.nextInt();
    if (unit <= 50) {
      amount = unit * 0.50;
    } else if (unit <= 150) {
      amount = 25 + ((unit - 50) * 0.75);
    } else if (unit <= 250) {
      amount = 100 + ((unit - 150) * 1.20);
    } else {
      amount = 220 + ((unit - 250) * 1.50);
    }
    charge_amount = amount * 0.20;
    total_amount = amount + charge_amount;
    System.out.println("Electricity bill price=" + total_amount);
  }
}
-------------------------------------------------------------
//import java.util.Scanner;
class WeekDay
{
        public static void main(String[] args)
        {
                Scanner input = new Scanner(System.in);
                System.out.print("Enter the Week Number(1-7) :");
                int num = input.nextInt();
                if(num==1)
                        System.out.println("This is a Sunday");
                else if(num==2)
                        System.out.println("This is a Monday");
                else if(num==3)
                        System.out.println("This is a Tuesday");
                else if(num==4)
                        System.out.println("This is a Wednesday");
                else if(num==5)
                        System.out.println("This is a Thursday");
                else if(num==6)
                        System.out.println("This is a Friday");
```

```
                else if(num==7)
                        System.out.println("This is a Saturday");
                else
                        System.out.println("Enter 1 to 7...");
        }
}
```

```
//import java.util.Scanner;
class Notes{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the Amount :");
        int amt= sc.nextInt();//2550
        int n2000,n500,n200,n100,n50,n20,n10,n5;
        n2000=n500=n200=n100=n50=n20=n10=n5=0;
    if(amt>=2000)
    {
      n2000=amt/2000;
      amt=amt-n2000*2000;
      System.out.println("number of 2000 notes="+n2000);//550
    }
    if(amt>=500)
    {
      n500=amt/500;
      amt=amt-n500*500;//50
      System.out.println("number of 500 notes="+n500);
    }
    if(amt>=200)
    {
      n200=amt/200;
      amt=amt-n200*200;
      System.out.println("number of 200 notes="+n200);
    }
    if(amt>=100)
    {
      n100=amt/100;
      amt=amt-n100*100;
      System.out.println("number of 100 notes="+n100);
    }
    if(amt>=50)
    {
      n50=amt/50;
      amt=amt-n50*50;
      System.out.println("number of 50 notes="+n50);
    }
    if(amt>=20)
    {
```

```
      n20=amt/20;
      amt=amt-n20*20;
      System.out.println("number of 20 notes="+n20);
    }
    if(amt>=10)
    {
      n10=amt/10;
      amt=amt-n10*10;
      System.out.println("number of 10 notes="+n10);
    }
    if(amt>=5)
    {
      n5=amt/5;
      amt=amt-n5*5;
      System.out.println("number of 5 notes="+n5);
    }
    System.out.println("total no of notes="+(n2000+n500+n200+n100+n50+n20+n10+n5));
  }
}
```
