**1.Write a java program to check whether given number is Armstrong number or not.**

**package** hari;

**import** java.util.\*;

**public** **class** While3 {

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

// To check the given number is Armstrong or not//

**int** n,sum=0,rem,a;

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

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

n=sc.nextInt();

a=n;

**while**(n>0)

{

rem=n%10;

sum=(rem\*rem\*rem)+sum;

n=n/10;

}

**if**(a==sum)

System.***out***.println("It is a Armstrong number");

**else**

System.***out***.println("It is not a Armstrong number");

}

}

**Output:**

Enter a number

370

It is a Armstrong number

**2. Write a program to display all the Armstrong number between 10 to 1000**

**package** hari;

**public** **class** While4 {

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

// program to display all Armstrong numbers from 1-1000

**int** i,num,r,sum=0;

System.***out***.println("Armstrong numbers between 10 to 1000"

+ "");

**for**(i=10;i<=10000;i++)

{

sum=0;

num=i;

**while**(num>0)

{

r=num%10;

sum=sum+(r\*r\*r);

num=num/10;

}

**if**(sum==i)

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

}

}

}

**Output:**

Armstrong numbers between 10 to 1000

153

370

371

407

**3. Write a program to find sum of the following series**

**a. Sum=x-1/x+2/x-3/x…..n/x**

**b. 1!+2!+3!+……**

**a.**

**package** hari;

**import** java.util.\*;

**public** **class** Series {

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

//program to display sum of series//

**int** i,n;

**float** x,sum=0;

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

System.***out***.println("Enter x value");

x=sc.nextInt();

System.***out***.println("Enter n value");

n=sc.nextInt();

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

{

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

sum=sum-(**float**)i/x;

**else**

sum=sum+(**float**)i/x;

}

System.***out***.println(" sum of series" +sum);

}

}

**Output:**

Enter x value

2

Enter n value

6

sum of series-1.5

**b.**

**Package hari**.com;

**import** java.util.\*;

**public** **class** fact {

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

// **TODO** Auto-generated method stub

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

System.***out***.print("Enter the value of n: ");

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

scanner.close();

**int** sum = 0;

**int** factorial = 1;

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

{

factorial \*= i; // calculate factorial

sum += factorial; // add factorial to the sum

}

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

}

**Output:** Enter the value of n: 5

Sum of the series is: 153

**4.Write a java program to check given number is perfect number or not .**

**package** hari;

**import** java.util.Scanner;

**public** **class** Perfectno

{

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

// program to check perfect number//

**int** num,sum=0,i;

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

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

num=key.nextInt();

**for**(i=1;i<num;i++)

{

**if**(num%i==0)

{

sum=sum+i;

}

}

**if**(num==sum)

{

System.***out***.println("It is perfect number");

}

**else**

{

System.***out***.println("It is not perfect number");

}

}

}

**Output:**

Enter any number

496

It is perfect number

**5.Display all perfect numbers between 1 to 100000**

**package** hari;

**public** **class** Perfect1 {

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

// program to display perfect numbers from 1 to 100000//

**int** i,j,num,sum;

**for**(i=1;i<=100000;i++)

{

num=i;

sum=0;

**for**(j=1;j<num;j++)

{

**if**(num%j==0)

sum=sum+j;

}

**if**(sum==num)

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

}

}

}

**Output:**

6

28

496

8128

**6.Write a program to extract only character from a string.Eg:AF02284Khff->AFKhff**

**package** Tsgol.com;

**import** java.util.\*;

**public** **class** Stringch {

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

String text,string="";

**char** ch;

**int** i;

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

System.***out***.println("Enter your text");

text=obj.next();

System.***out***.println("Length of the string " +text.length());

**for**(i=0;i<text.length();i++)

{

ch=text.charAt(i);

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

string=string+ch;

}

System.***out***.println("extracted string " +string);

}

}

**Output:**

Enter your text

AF022842khh

Length of the string 11

extracted string AFkhh

**7.Write a program to find reverse of digits.**

**package** hari;

**import** java.util.\*;

**public** **class** While2

{

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

**int** rev=0;

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

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

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

**while**(num!=0)

{

**int** remainder=num%10;

rev=rev\*10+remainder;

num=num/10;

}

System.***out***.println("The reverse of given number is "+rev);

}

}

**Output:**

Enter a number

678

The reverse of given number is 876

**8.Write a program to find power value of given base and exponent.**

**package** Tsgol.com;

**import** java.util.\*;

**public** **class** Basepower {

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

// **TODO** Auto-generated method stub

**int** n,p,result=1;

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

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

n=obj.nextInt();

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

p=obj.nextInt();

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

{

result=n\*result;

}

System.***out***.println("power " +result);

}

}

**Output:**

Enter a number

4

Enter power

3

power 64

**9.Write a program to convert every first letter of string to capital letter**

Eg:the Hindu -> The Hindu

**package** Tsgol.com;

**public** **class** Capletter {

String[] str,str2;

**int** size ;

Capletter(String[]s,**int** n)

{

str=s;

str2=s;

size=n;

}

**void** Converto()

{

**int** i;

**for**(i=0;i<size;i++)

{

String res=str[i].substring(0, 1).toUpperCase()+str[i].substring(1);

str2[i]=res;

}

}

**void** display()

{

**for**(**int** i=0;i<size;i++)

System.***out***.println(str2[i]);

}

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

String[] text= {"the Hindu"};

Capletter obj=**new** Capletter(text,text.length);

obj.Converto();

obj.display();

}

}

Output:

The Hindu

10.Write a program to count number of digits present in a string.

**package** Tsgol.com;

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

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

String s="Program to count number of digits123456";

**int** count=0;

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

{

**if**(Character.*isDigit*(s.charAt(i)))

count++;

}

System.***out***.println("The number of digits in the given string : "+count);

}

}

Output:

The number of digits in the given string : 6

By

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-----------------------------------------THE END-------------------------------------