

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

```
package Monday;
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
407
It is a armstrong number
```

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

```
package Monday;
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. $\text{Sum} = x - 1/x + 2/x - 3/x + \dots + n/x$

b. $1! + 2! + 3! + \dots$

a.

```

package Monday;
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 Monday.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 Monday;
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
6
It is perfect number

```

5.Display all perfect numbers between 1 to 100000

```

package Monday;

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 Monday;
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
655
The reverse of given number is 556
```

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

2

power 16

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 Convertto()
    {
        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.Convertto();
    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-----