//p1. Write a java program to display factors of a given number.
PROGRAM :

```
class Factors {
    public static void main(String[] args) {

        // We store the number, of which we wish to obtain the factors in variable n
        int luffy = 1000;

        // Now, using for loop and with the following logic, we shall determine the
        // factors of the integer stored in n
        for (int i = 1; i <= luffy; i++) {
            if (luffy % i == 0) {
                System.out.printf(" %d ", i);
            }
        }
    }
}
```

//p2. Write a java program to check given number is palindrome or not.
PROGRAM :

```
public class Pal  {

    public static void main(String args[])
    {
  Scanner in = new Scanner(System.in);
     System.out.print("Input a number: ");
     int n = in.nextInt();
     int sum = 0, r;
  int temp = n;
     while(n>0)
    {
        r = n % 10;
        sum = (sum*10)+r;
        n = n/10;
       }
      if(temp==sum)
        System.out.println("It is a Palindrome number.");
      else
        System.out.println("Not a palindrome");
     }
}
```

//p3. Write a java program to check given number is Armstrong or not.
program:

```
public class JavaExample {

    public static void main(String[] args) {

        int num = 370, number, temp, total = 0;

        number = num;
        while (number != 0)
        {
            temp = number % 10;
            total = total + temp*temp*temp;
            number /= 10;
```

```
        }

        if(total == num)
            System.out.println(num + " is an Armstrong number");
        else
            System.out.println(num + " is not an Armstrong number");
    }
}
```

Output:

370 is an Armstrong number

//p4. Write a java program to check given number is perfect or not.
PROGRAM:

```
public class Perfect
{
    public static void main(String[] args)
    {
        int n, sum = 0;
        Scanner s = new Scanner(System.in);
        System.out.print("Enter the number: ");
        n = s.nextInt();
        for(int i = 1; i < n; i++)
        {
            if(n % i == 0)
            {
                sum = sum + i;
            }
        }
        if(sum == n)
        {
            System.out.println("Given number is a perfect number");
        }
        else
        {
            System.out.println("Given number is not a perfect number");
        }
    }
    int divisor(int x)
    {
       return x;
    }
}
```

Output: perfect or not

//p5. Write a java program to display sum of digits of a given number.
PROGRAM:

```
public class Digit_Sum
{
    public static void main(String args[])
    {
        int m, n, sum = 0;
```

```
        Scanner s = new Scanner(System.in);
        System.out.print("Enter the number:");
        m = s.nextInt();
        while(m > 0)
        {
            n = m % 10;
            sum = sum + n;
            m = m / 10;
        }
        System.out.println("Sum of Digits:"+sum);
    }
}
```

Output:

```
Enter the number:99
Sum of Digits:18
```