A. WAP to print number of factors for the given number.

```
import java.util.Scanner;
public class Day3c {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter a number to find the number of factorials: ");
        int number = scan.nextInt();
        int count=0;
        for (int i = 1; i <= number / 2; i++) {
            if (number % i == 0) {
                count+=1;
            }
        }

       System.out.println("number of factorials: "+count);
    }
}
```

B. WAP to print sum of factors for the given number.

```
    import java.util.Scanner;
public class Day3d {
    public static void main(String[] args) {
        Scanner scan=new Scanner(System.in);
        System.out.println("Enter a number to print the sum of its factorials: ");
        int number=scan.nextInt();
        int sum=0;
        for(int i=1;i<=number/2;i++){
            if(number%i==0){
                sum+=i;
            }
        }
        System.out.println("sum of factorials is: "+sum);
    }
}
```

C. WAP to check given number is prime number or not

```
        import java.util.Scanner;
public class Day3e {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter a number to check if it is prime or not: ");
        int number = scan.nextInt();
        int count = 0;
        for (int i = 1; i <= number / 2; i++) {
            if (number % i == 0) {
                count += 1;
            }
        }
        if (count == 1) {
            System.out.println("PRIME NUMBER: " + count);
        } else {
            System.out.println("NOT PRIME NUMBER: " + count);
        }
    }
}
```

D. WAP to check given number is perfect number or not

```
import java.util.Scanner;
public class Day3f {
    public static void main(String[] args) {
        Scanner scan=new Scanner(System.in);
        System.out.println("Enter a number to check if it is perfect or not: ");
        int number=scan.nextInt();
        int sum=0;
        for(int i=1;i<=number/2;i++){
            if(number%i==0){
                sum+=i;
            }
        }
        if(sum==number){
            System.out.println("PERFECT NUMBER: "+ sum);
        }
```

```
        else{
            System.out.println("NOT PERFECT NUMBER: "+sum);
        }
    }
}
```