Programs using accepting input through keyboard

Print the Fibonacci series upto the nth term taking the value of n from the user.

```java
import java.util.Scanner;
class Fibonacci
{
    public static void main(String args[])
    {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter the number of terms to print: ");
        int n = sc.nextInt();
        int a = 0;
        int b = 1;
        for( int i = 0; i < n  ; i++)
        {
            System.out.print(a + "  ");
            b = b + a;
            a = b - a;
        }
    }
}
```

Output :

```
Enter the number of terms to print: 10
0  1  1  2  3  5  8  13  21  34
```

WAP to reverse the given no.

```java
import java.util.Scanner;
class Reverse
{
    public static void main(String args[])
    {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter a number: ");
        int num = sc.nextInt();
        int rem, rev = 0;
        while(num > 0)
        {
            rem = num%10;
            rev = rev*10 + rem;
            num = num/10;
        }
        System.out.println("The Reverse of the given number is: " + rev);
```

```
    }
}
```

Output :

```
Enter a number: 1234
The Reverse of the given number is: 4321
```

WAP to calculate area & circumference of circle

```
import java.util.Scanner;
class AreaCircumference
{
    public static void main(String args[])
    {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter the radius of the Circle: ");
        int radius = sc.nextInt();
        double area = Math.PI*Math.pow(radius, 2);
        double circumference = 2*Math.PI*radius;
        System.out.println("The circumference is " + circumference +
                           " and the Area is "+ area);
    }
}
```

Output :

```
Enter the radius of the Circle: 4
The circumference is 25.132741228718345 and the Area is 50.26548245743669
```

WAP to swap given two strings

```
import java.util.Scanner;
class Swap
{
    public static void main(String args[])
    {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter a string: ");
        String str1 = sc.nextLine();
        System.out.print("Enter another string: ");
        String str2 = sc.nextLine();
        System.out.println("Strings Before Swapping: " + "str1: " +
                           str1+ " str2: "+ str2);
        String temp = str1;
        str1 = str2;
        str2 = temp;
        //Write about copying references and making a deep copy
```

```
        System.out.println("Strings After Swapping: " + "str1: " +
                           str1+ " str2: "+ str2);
    }
}
```

Output :

```
Enter a string: Hi
Enter another string: There
Strings Before Swapping: str1: Hi str2: There
Strings After Swapping: str1: There str2: Hi
```

WAP to convert temperature from Fahrenheit to Celsius

```
import java.util.Scanner;
class FarenheitToCelsius
{
    public static int toCelsius(int farenheit)
    {
        return (farenheit - 32) * 5 / 9;
    }
    public static void main(String args[])
    {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter the temperature in Farenheit: ");
        int fahrenheit = sc.nextInt();
        int celsius = toCelsius(fahrenheit);
        System.out.print("The temperature in Celsius: " + celsius);
    }
}
```

Output :

```
Enter the temperature in Farenheit: 32
The temperature in Celsius: 0
```

WAP to find a square, square root, and Cube of a given no. using abstraction

```
// WAP to find a square, square root, and Cube of a given no. using abstraction
import java.util.Scanner;
class MathOperations
{
    public static double cube(double num)
    {
        return num*num*num;
    }

```

```
10      public static double square(double num)
11      {
12          return num*num;
13      }
14
15      public static double sqrt(double num)
16      {
17          double i;
18          for(i = 0; !(i*i > num); i = i + 0.01);
19          return i;
20      }
21      public static void main(String args[])
22      {
23          int i = 10;
24          i = (int) cube(i);
25          int j = 100;
26          j = (int) sqrt(j);
27          System.out.println(j);
28          System.out.println(i);
29      }
30  }
```

Output :

```
Enter a number: 100
Enter the operation: 1. Square 2. Square Root 3. Cube 4. Exit: 1
10000
Enter the operation: 1. Square 2. Square Root 3. Cube 4. Exit: 2
10
Enter the operation: 1. Square 2. Square Root 3. Cube 4. Exit: 3
1000000
Enter the operation: 1. Square 2. Square Root 3. Cube 4. Exit: 4
```