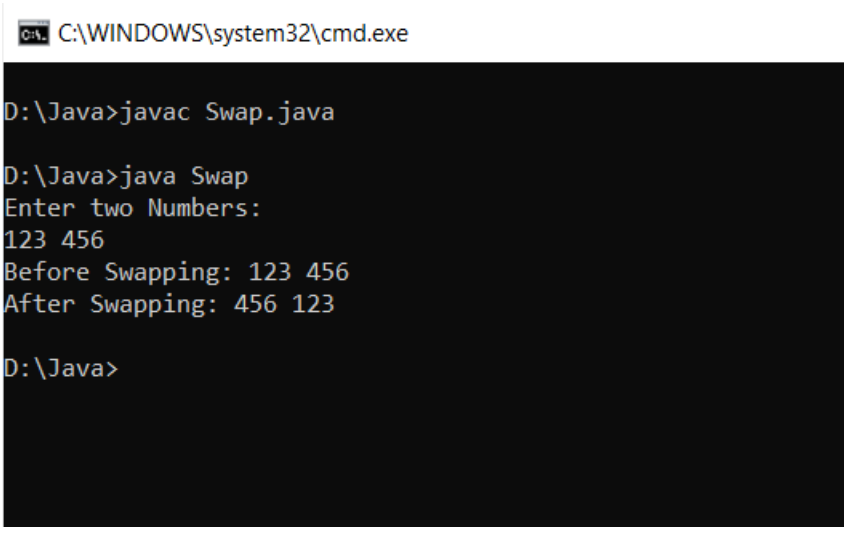
1.Write a program to swap two numbers in Java.

```
import java.util.Scanner;
public class Swap{
	public static void main(String args[]){
		Scanner s = new Scanner(System.in);
		System.out.println("Enter two Numbers: ");
		int a = s.nextInt();
		int b = s.nextInt();
		System.out.println("Before Swapping: "+a+" "+b);

		//Swapping using temp
		int temp = a;
		a = b;
		b = temp;
		System.out.println("After Swapping: "+a+" "+b);
	}
}
```



2.Write a program to print all the elements of the Fibonacci series.

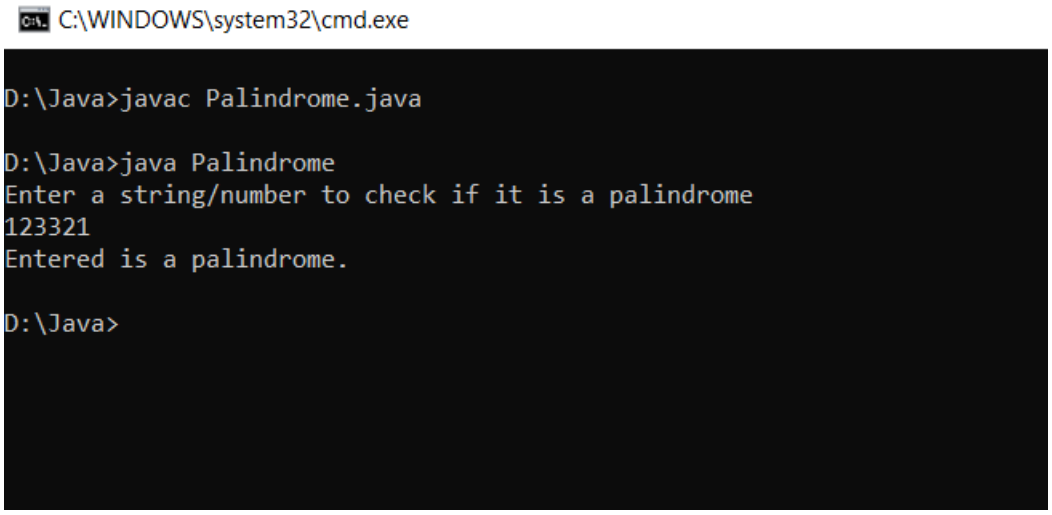
```
class Fibonacci{
 static int n1=0,n2=1,n3=0;
 static void printFibonacci(int count){
   if(count>0){
       n3 = n1 + n2;
       n1 = n2;
       n2 = n3;
       System.out.print(" "+n3);
       printFibonacci(count-1);
    }
 }
 public static void main(String args[]){
  int count=10;
 System.out.print(n1+" "+n2);//printing 0 and 1
 printFibonacci(count-2);//n-2 because 2 numbers are already printed
 }
}
```

0 1 1 2 3 5 8 13 21 34

3.Check if a given number is palindrome or not.

```
import java.util.*;
class Palindrome
{
public static void main(String args[])
{
String original, reverse = ""; // Objects of String class
Scanner in = new Scanner(System.in);
System.out.println("Enter a string/number to check if it is a palindrome");
original = in.nextLine();
int length = original.length();
for ( int i = length - 1; i>= 0; i-- )
```

```
reverse = reverse + original.charAt(i);
if (original.equals(reverse))
System.out.println("Entered is a palindrome.");
else
System.out.println("Entered is not a palindrome.");
}
}
```



4.Write a program to find whether a number is an Armstrong number or not.

```
import java.util.*;
public class Armstrong{
	public static void main(String args[]){
		Scanner s = new Scanner(System.in);
		System.out.println("Enter the Number: ");
		int num = s.nextInt();
		int Onum, re ,result=0;

		Onum = num;
		while(Onum!=0){
			re = Onum%10;
			result+=Math.pow(re,3);
			Onum/=10;
		}
	if(result==num)
		System.out.println(num+" is an Armstrong Number");
```

```
        else
                System.out.println(num+" is  not an Armstrong Number");
 }
}
```

```
D:\Java>notepad

D:\Java>notepad Armstrong.java

D:\Java>javac Armstrong.java

D:\Java>java Armstrong
Enter the Number:
371
371 is an Armstrong Number

D:\Java>
```

5.Find the GCD of two numbers.

```
public class GCD{
        public static void main(String args[]){
                int x =14 , y=10, gcd = 1;
                for(int i = 1; i<=x &&i<=y; i++){
                        if(x%i==0 &&y%i==0)
                        gcd = i;
                }
                System.out.println("GCD of two numbers is: "+x+" "+y+" "+gcd);
        }
}
```

```
D:\Java>notepad GCD.java

D:\Java>javac GCD.java

D:\Java>java GCD
GCD of two numbers is: 14 10 2

D:\Java>
```

7.Write a program to find the lcm of two numbers.

```
public class LCM
{
public static void main(String args[])
{
int a = 14, b = 7, gcd = 1;
for(int i = 1; i<= a &&i<= b; ++i)
{
if(a % i == 0 && b % i == 0)
gcd = i;
}
int lcm = (a * b) / gcd;
System.out.printf("The LCM of two nos" +a, +b, +lcm);
}
}
```

```
D:\Java>javac LCM.java

D:\Java>java LCM
The LCM of two nos14
D:\Java>
```

8.Calculate the sum of digits of a given number.

```
import java.util.Scanner;
public class SDigits
{
public static void main(String args[])
{
int number, digit, sum = 0;
Scanner sc = new Scanner(System.in);
System.out.print("Enter the number: ");
number = sc.nextInt();
while(number > 0)
{
digit = number % 10;
sum = sum + digit;
number = number / 10;
}
System.out.println("Sum of Digits: "+sum);
}
}
```

```
D:\Java>javac SDigits.java

D:\Java>java SDigits
Enter the number: 1023654
Sum of Digits: 21

D:\Java>
```

9.Write a program to reverse a string.

```
public class Rev{
	public static void main(String[] args) {
		StringBuffer sb = new StringBuffer("Hanumanthu");
	System.out.println("string: " + sb);
```

```
        System.out.println("reverse: " + sb.reverse());
        }
}
```

```
D:\Java>notepad Rev.java

D:\Java>javac Rev.java

D:\Java>java Rev
string: Hanumanthu
reverse: uhtnamunaH

D:\Java>
```