Aim:

Write a Java program that demonstrates the use of all primitive data types. Your program should prompt the user to input values for each primitive data type (byte, short, int, long, float, double, char, boolean) and then print out those values.

Source Code:

PrimitiveDataTypes.java

```java
import java.io.*;
import java.util.Scanner;
class PrimitiveDataTypes{
    static byte a;
    static short b;
    static int c;
    static long d;
    static float e;
    static double f;
    static char g;
    static boolean h;
    public static void main(String args[])
    {
        Scanner obj=new Scanner(System.in);
        System.out.print("Byte value: ");
        a=obj.nextByte();
        System.out.print("short value: ");
        b=obj.nextShort();
        System.out.print("int value: ");
        c=obj.nextInt();
        System.out.printf("long value: ");
        d=obj.nextLong();
        System.out.print("float value: ");
        e=obj.nextFloat();
        System.out.printf("double value: ");
        f=obj.nextDouble();
        System.out.print("char value: ");
        g=obj.next().charAt(0);
        System.out.print("boolean value (true/false): ");
        h=obj.nextBoolean();
        System.out.println("byteVar: "+a);
        System.out.println("shortVar: "+b);
        System.out.println("intVar: "+c);
        System.out.println("longVar: "+d);
        System.out.println("floatVar: "+e);
        System.out.println("doubleVar: "+f);
        System.out.println("charVar: "+g);
        System.out.println("booleanVar: "+h);
    }
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Byte value: 127
short value: 32767
int value: 2147483647
long value: 9223372036854775807
float value: 123.456
double value: 9876.54321
char value: Z
boolean value (true/false): true
byteVar: 127
shortVar: 32767
intVar: 2147483647
longVar: 9223372036854775807
floatVar: 123.456
doubleVar: 9876.54321
charVar: Z
booleanVar: true