```java
import java.math.BigInteger;
class DataTypesDemo {
    //Integers...
    byte byteBasket; //Range: -128 to 127(quantity)
    short shortBasket;
    int intBasket;
    long longBasket;
    float floatBasket;
    double doubleBasket;
    char charBasket;
    boolean booleanBasket;
    public static void main(String args[]){
        System.out.println("Welcome to Data Types Demo");
        //Integers Demo
        //byte
        DataTypesDemo d = new DataTypesDemo();

        System.out.println("========byte==========");
        System.out.println("Default value of byte is: "+d.byteBasket);
        d.byteBasket = -110;
        System.out.println(d.byteBasket);
        System.out.println("Range");
        System.out.println("min value is: "+Byte.MIN_VALUE);
        System.out.println("max value is: "+Byte.MAX_VALUE);

        System.out.println("========short==========");
        System.out.println("Default value of short is: "+d.shortBasket);
        d.shortBasket = -32768;
        System.out.println(d.shortBasket);
        System.out.println("Range");
        System.out.println("min value is: "+Short.MIN_VALUE);
        System.out.println("max value is: "+Short.MAX_VALUE);

        System.out.println("========int============");
        System.out.println("Default value of int is: "+d.intBasket);
        d.intBasket = 99;//Decimal literals
        //binary - 2 (base 2) - 0 or 1
        System.out.println("decimal value: "+d.intBasket);
        d.intBasket = 0b01100011; //binary number: 0b /0B
        System.out.println("binary value: "+d.intBasket);
        System.out.println(d.intBasket);
        d.intBasket = 0143;//octal number
        System.out.println("octal value: "+d.intBasket);
        d.intBasket = 0X7fffffff; //hexa decimal value
        System.out.println("hexa decimal value: "+d.intBasket);
        System.out.println("Range");
        System.out.println("min value is: "+Integer.MIN_VALUE);
        System.out.println("max value is: "+Integer.MAX_VALUE);

        d.byteBasket = 13; //int
        d.shortBasket = 32765;  //int
        d.intBasket = 7_80_000_08; //int
        System.out.println(d.intBasket);

        System.out.println("========long============");
        System.out.println("Default value of long is: "+d.longBasket);
        d.longBasket = 939982; //long literal - l , L
        System.out.println(d.longBasket);
        //long videoViews = 23992929929299292992929292L;
        BigInteger videoViews1 = new BigInteger("23");
        BigInteger videoViews2 = new BigInteger("2");
        System.out.println(videoViews1.multiply(videoViews2));

        System.out.println("video views :"+videoViews1);


        System.out.println("=======float==========");
        System.out.println("Default value of float is: "+d.floatBasket);
        d.floatBasket = 1.287f;
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70          System.out.println(d.floatBasket);
71
72          System.out.println("min value: "+Float.MIN_VALUE);
73          System.out.println("max value: "+Float.MAX_VALUE);
74
75          System.out.println("=======double==========");
76          System.out.println("Default value of double is: "+d.doubleBasket);
77          d.doubleBasket = 288.282;//double
78          System.out.println(d.doubleBasket);
79
80          System.out.println("min value: "+Double.MIN_VALUE);
81          System.out.println("max value: "+Double.MAX_VALUE);
82
83          float a = 9.F;
84          System.out.println(a);
85
86          float b = 5.67f;
87          System.out.println(b);
88          float c = 567e-2f;//scientific notation...
89          System.out.println(c);
90          float e = 34.776288f;
91          System.out.println(e);
92          float f = 0.000034e6f;
93          System.out.println(0/-0.0f);
94
95          float var1 = 1.0f;
96          float var2 = 0.8f;
97
98          System.out.println(var1+var2);
99          System.out.println(var1-var2);
100
101         System.out.println("=======char==========");
102         System.out.println(d.charBasket);//default value of char is empty: null
103         //to store the characters..
104         float var3 = 'a';
105         System.out.println(var3);
106
107         int var4 = 'A';
108         System.out.println(var4);
109
110         d.charBasket = 'A';
111         System.out.println(d.charBasket);
112
113         //'
114         d.charBasket = '\f';//next paragraph first line(obselete)
115         System.out.println("suresh"+d.charBasket+"techs");//techsh
116
117         d.charBasket = 49;
118         System.out.println(d.charBasket);
119         d.charBasket = '\u007D';
120         System.out.println(d.charBasket);
121         d.charBasket = '\u0000';//null
122         System.out.println(d.charBasket);
123         d.charBasket = '\43';//octal sequences...
124         System.out.println(d.charBasket);
125
126         int value = 100;
127         d.charBasket = 100;//error
128         System.out.println(d.charBasket);
129
130         System.out.println("========boolean=========");
131         System.out.println(d.booleanBasket);//false
132         d.booleanBasket = false;
133         System.out.println(d.booleanBasket);
134         //usage...
135         if(d.booleanBasket){
136             System.out.println("Primitive data types completed");
137         }
138     }
```

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139   }
```