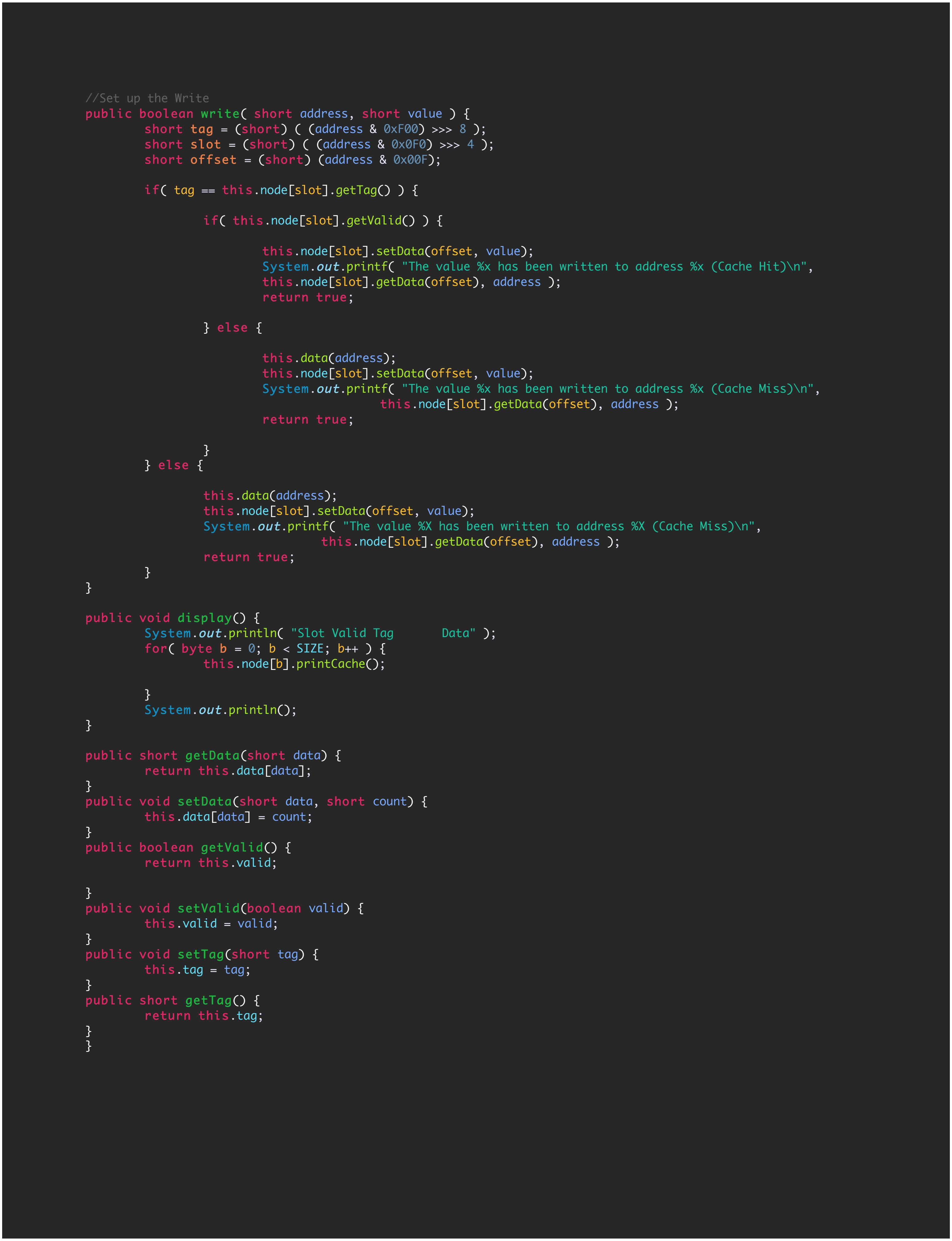

```java
//Set up the Write
public boolean write( short address, short value ) {
        short tag = (short) ( (address & 0xF00) >>> 8 );
        short slot = (short) ( (address & 0x0F0) >>> 4 );
        short offset = (short) (address & 0x00F);

        if( tag == this.node[slot].getTag() ) {

                if( this.node[slot].getValid() ) {

                        this.node[slot].setData(offset, value);
                        System.out.printf( "The value %x has been written to address %x (Cache Hit)\n",
                        this.node[slot].getData(offset), address );
                        return true;

                } else {

                        this.data(address);
                        this.node[slot].setData(offset, value);
                        System.out.printf( "The value %x has been written to address %x (Cache Miss)\n",
                                        this.node[slot].getData(offset), address );
                        return true;

                }
        } else {

                this.data(address);
                this.node[slot].setData(offset, value);
                System.out.printf( "The value %X has been written to address %X (Cache Miss)\n",
                                this.node[slot].getData(offset), address );
                return true;
        }
}

public void display() {
        System.out.println( "Slot Valid Tag       Data" );
        for( byte b = 0; b < SIZE; b++ ) {
                this.node[b].printCache();

        }
        System.out.println();
}

public short getData(short data) {
        return this.data[data];
}
public void setData(short data, short count) {
        this.data[data] = count;
}
public boolean getValid() {
        return this.valid;

}
public void setValid(boolean valid) {
        this.valid = valid;
}
public void setTag(short tag) {
        this.tag = tag;
}
public short getTag() {
        return this.tag;
}
}
```