

```

public class Instruction_ {

    //Properties
    String type = "";
    int opCode;
    int rs = 0;
    int instruction = 0;
    int rt = 0;
    int rd = 0;
    int shamt = 0;
    int func = 0;
    short immediate = 0;
    String funcString;
    String opCodeString = "default";
    int instAdress = 630848;

    //Constructors
    public Instruction_(){

    }

    //Methods

    public String toString(){
        String rtn;
        if( this.getType() == "R" ){
            rtn = "Instrcution Type: R" + "\n" + " Function = " +
this.funcString + " RD = $" + this.getRd() + " RT = $" + this.getRt() + " RS = " +
Integer.toHexString(this.rs) + " Shamt = " + Integer.toBinaryString(this.getShamt()) ;
            return rtn;
        } else {
            rtn = "Instruction Type I" + "\n" + " OpCode = " + (
this.getOpCodeString() ) + " Rs = " + this.getRs() + " Rt = " + this.getRt() + "
Immediate/Offset = " + this.getImmediate();
            return rtn;
        }
    }

    public String getType() {
        return type;
    }
    public void setType(String type) {
        this.type = type;
    }
    public int getOpCode() {
        return opCode;
    }
    public void setOpCode(int newopCode) {
        this.opCode = newopCode;
    }
    public int getRs() {
        return rs;
    }
    public void setRs(int rs) {
        this.rs = rs;
    }
}

```

