

```

package college1;
import javax.swing.JOptionPane;
public class college1
{

```

Program written without
methods

```

    public static void main(String[] args)
    {
        String name,major,more_data = "yes",value,output="",high_major="";
        int year,year1=0,year2=0,year3=0,year4=0,    mathcount=0,ciscount=0;;
        while(more_data.equals("yes"))
        {
            name=JOptionPane.showInputDialog(null,"Enter student name ",
                "Input Data",JOptionPane.QUESTION_MESSAGE);
            value=JOptionPane.showInputDialog(null,"Enter the year, 1,2,3,or 4 ",
                "Input Data",JOptionPane.QUESTION_MESSAGE);
            year=Integer.parseInt(value);
            major=JOptionPane.showInputDialog(null,"Enter the major, Math or CIS ",
                "Input Data",JOptionPane.QUESTION_MESSAGE);

            if(year==1)
                year1=year1+1;
            else
                if(year==2)
                    year2=year2+1;
                else
                    if(year==3)
                        year3=year3+1;
                    else
                        year4=year4+1;
            if(major.equals("Math"))
                mathcount = mathcount + 1;
            else
                ciscount = ciscount + 1;

            more_data=JOptionPane.showInputDialog(null,"More data? yes/no",
                "Input Data",JOptionPane.QUESTION_MESSAGE);
        } //END OF WHILE LOOP
        if(mathcount>ciscount)
            high_major="Math";
        else
            high_major="CIS";
        output=output+"The total number of freshman = "+year1+"\n";
        output=output+"The total number of sophomores = "+year2+"\n";
        output=output+"The total number of juniors = "+year3+"\n";
        output=output+"The total number of seniors = "+year4+"\n"+"n";
        output=output+"The major with the most students= "+high_major;
        JOptionPane.showMessageDialog(null, output, "All Output:",
            JOptionPane.INFORMATION_MESSAGE);
        System.exit(0);
    }
}

```

```

package college1_methods;
import javax.swing.JOptionPane;
public class college1_methods

```

Program written with methods

```

    public static void main(String[] args)
    {
        String name,major,more_data = "yes",value,output="",high_major="";
        int year,year1=0,year2=0,year3=0,year4=0,    mathcount=0,ciscount=0;;
        while(more_data.equals("yes"))
        {
            name=namein();
            year=yearin();
            major=majorin();
            if(year==1)
                year1=year1+1;
            else
                if(year==2)
                    year2=year2+1;
                else
                    if(year==3)
                        year3=year3+1;
                    else
                        year4=year4+1;
            if(major.equals("Math"))
                mathcount = mathcount + 1;
            else
                ciscount = ciscount + 1;
            more_data=JOptionPane.showInputDialog(null,"More data? yes/no",
                "Input Data",JOptionPane.QUESTION_MESSAGE);
        }//END OF WHILE LOOP
        high_major=find_high(mathcount,ciscount);
        final_print(year1, year2,year3,year4,high_major);
        System.exit(0);
    }

```

```

    public static String namein()
    {
        String name;
        name=JOptionPane.showInputDialog(null,"Enter student name ",
            "Input Data",JOptionPane.QUESTION_MESSAGE);
        return name;
    }

```

```

    public static int yearin()
    {
        String value;
        int year;
        value=JOptionPane.showInputDialog(null,"Enter the year, 1,2,3,or 4 ",
            "Input Data",JOptionPane.QUESTION_MESSAGE);
        year=Integer.parseInt(value);
        return year;
    }

```

```

public static String majorin()
{
    String major=JOptionPane.showInputDialog(null,"Enter the major, Math or CIS ",
        "Input Data",JOptionPane.QUESTION_MESSAGE);
    return major;
}

public static String find_high(int mathcount,int ciscount)
{
    String high_major="";
    if(mathcount>ciscount)
        high_major="Math";
    else
        high_major="CIS";
    return high_major;
}

public static void final_print(int year1,int year2,int year3,int year4,String high_major)
{
    String output="";
    output=output+"The total number of freshman = "+year1+"\n";
    output=output+"The total number of sophomores = "+year2+"\n";
    output=output+"The total number of juniors = "+year3+"\n";
    output=output+"The total number of seniors = "+year4+"\n"+"n";
    output=output+"The major with the most students= "+high_major;
    JOptionPane.showMessageDialog(null, output, "All Output:",
        JOptionPane.INFORMATION_MESSAGE);
}
}

```