```
/*****************主教材各章例题SAS程序************/
/***************第八章**************/

/****例8-1，完全随机设计方差分析****************/
data a8_1;
  input group coll;
  cards;
1   6.82
1   5.73
1   7.19
1   7.93
1   7.62
1   7.77
1   7.9
1   7.89
2   5.66
2   4.82
2   5.53
2   4.98
2   4.4
2   4.18
2   4.07
2   4.11
3   2.13
3   2.71
3   2.5
3   2.67
3   3.6
3   3.36
3   2.33
3   2.85
;
proc univariate normal;
  class group;
  var coll;
run;
proc glm data=a8_1;
  class group;
  model coll=group;
  output p=pred r=resi stdr=dtdr student=sturesi;
  means group/snk dunnett('1') hovtest=levene(type=abs);
run;
proc gplot;
  plot sturesi*group/haxis=0 to 4;
  plot sturesi*pred;
run;

/****例8-2，方差分析****************/
data a8_2;
  input group si@@;
  cards;
1   66.51  2   52.04  3   75     4   98.69
1   37.1   2   61.71  3   52.7   4   85.62
```

```
1   52.27  2   64.58  3   99.43  4   77.57
1   62.63  2   64.17  3   97.69  4   82.23
1   72.8   2   57.13  3   89.35  4   96.16
1   46.32  2   51.79  3   72.06  4   105.51
1   56.48  2   47.72  3   110.5  4   103.42
1   67.91  2   50.92  3   83.87  4   98.22
1   74.81  2   33.93  3   77.07  4   83.72
1   63.08  2   51.31  3   74.86  4   104.54
1   48.17  2   53.16  3   105.71 4   80.56
1   42.71  2   40.68  3   84.55  4   105.67
1   58.97  2   43.94  3   84.4   4   107.56
1   57.12  2   56.48  3   98.41  4   104.93
1   54.91  2   68.75  3   76.44  4   76.15
1   71.01  2   61.05  3   80.35  4   79.32
1   43.92  2   64.68  3   112.94 4   84.06
1   48.74  2   50.54  3   84.33  4   83.12
1   62.13  2   67.79  3   77.92  4   62.23
1   54.63  2   69.3   3   74.82  4   91.73
;
proc univariate normal;
  class group;
  var si;
run;
proc glm data=a8_2;
  class group;
  model si = group;
  means group/ Bon hovtest=bartlett;
run;

/****例8-3，见例8-1***************/

/****例8-4，随机区组方差分析***************/
data a8_4;
  input group block cure@@;
  cards;
1   1   58.02  2   1   71.9   3   1   66.27
1   2   52.7   2   2   56.35  3   2   60.59
1   3   60.22  2   3   70.08  3   3   66.12
1   4   44.49  2   4   56.6   3   4   55.36
1   5   59.31  2   5   68.25  3   5   53.39
1   6   56.23  2   6   63.36  3   6   52.34
1   7   55.16  2   7   66.12  3   7   55.16
1   8   42.48  2   8   50.02  3   8   58.64
1   9   50.84  2   9   66.97  3   9   44.01
1   10  49.38  2   10  67.05  3   10  52.49
1   11  55.16  2   11  69.89  3   11  59.99
1   12  53.47  2   12  61.08  3   12  61.08
;
proc univariate normal;
  class group;
  var cure;
run;
proc glm;
  class group block;
```

```
  model cure = group block;
run;

/****例8-5，见例8-1***************/
```