























































```

81  c_mat=(x1`*x1)-(x1`*x2*(ginv(x2`*x2))*x2`*x1)/*C matrix*/;
82  print c_mat;
83  /*For block set-up*/
84  x=m1||dir||column;/*design matrix
85  print x[format=3.0];
86  x1=dir;
87  x2=m1||column;
88  c_mat=(x1`*x1)-(x1`*x2*(ginv(x2`*x2))*x2`*x1)/*C matrix;
89  print c_mat;
90  rep=dir`*dir;
91  *print rep;
92  eig=eigval(c_mat);
93  print eig;
94  eig1=eig[loc(eig>0.0000001),];/*positive eigen values*/
95  rep=dir`*dir;
96  eig2=eig1/(rep[1,1]);/*assuming same replications*/
97  eig3=1/eig2;
98  CanEffFactor=nrow(eig3)/sum(eig3);
99  print CanEffFactor;
100 quit;
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```

<p><i>For block set-up, row may be excluded in x2 and column is treated as block</i></p>
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