clc;

close all;

clear all;

%进化的代数

T=100;

optionsOrigin=gaoptimset('Generations',T/2,'PopInitRange',[-10,-5;0,2],'MigrationFraction',0.2);

[x,fval,reason,output,finnal\_pop]=ga(@ch14\_2f,2,optionsOrigin);

%进行第二次接力进化

options1 = gaoptimset('Generations',T/2,'InitialPopulation',finnal\_pop,'PlotFcns',@gaplotbestf,'MigrationFraction',0.2);

[x,fval,reason,output,final\_pop]=ga(@ch14\_2f,2,options1);

Bestx=x

BestFval=fval

%子函数:适应度函数同时也是目标函数，函数存储名称为ch14\_2f.m

function f=ch14\_2f(x)

g1=1.5+x(1)\*x(2)-x(1)-x(2);

g2=-x(1)\*x(2);

if(g1>0|g2>10)

f=100;

else

f=exp(x(1))\*(4\*x(1)^2+2\*x(2)^2+4\*x(1)\*x(2)+2\*x(2)+1);

end

'PopInitRange','PopulationSize','CrossoverFraction', 'MigrationFraction','Generations','TimeLimit',

'FitnessLimit','StallGenLimit','StakkTimeLimit','InitialPopulation','PlotFcns',@gaplotvestf,@gaplotbestindiv