```
#include <stdio.h>
#include <stdlib.h>
#define k1 0.008
#define k2 0.002
float chem1(float c1, float c2, float c3, float t){
   return(c1+(k2*c3-k1*c1*c2)*t);
}
float chem2(float c1, float c2, float c3, float t){
   return(c2+(k2*c3-k1*c1*c2)*t);
}
float chem3(float c1, float c2, float c3, float t){
   return(c3+(2*k1*c1*c2-2*k2*c3)*t);
}
int main(){
   FILE *fp;
   fp= fopen("lab1.csv","w");
   float c1=25, c2=50, c3=0, t=0, temp_c1, temp_c2, temp_c3;
   do{
         temp_c1=chem1(c1,c2,c3,t);
         temp_c2=chem2(c1,c2,c3,t);
         temp_c3=chem3(c1,c2,c3,t);
         fprintf(fp,"%f\t",t);
         fprintf(fp,"%f\t",temp_c1);
         fprintf(fp,"%f\t",temp_c2);
         fprintf(fp,"%f\n",temp_c3);
         c1=temp_c1;
         c2=temp_c2;
```

```
        c3=temp_c3;
        t+=0.25;
}while(t<10);
fclose(fp);
return 0;}
```