

```

#include <stdio.h>

#include <math.h>

void main()

{
    int n, i;

    float ex_f, c_cal, c_tab, e_freq[50], o_freq[50], sum;

    printf("How many numbers max[50] for frequency?");

    scanf("%d",&n);

    printf("Observed frequency:\n");

    for(i=0;i<n;i++)
    {
        printf("frequency [%d]",i);

        scanf("%f",&o_freq[i]);
    }

    sum=0;

    for(i=0;i<n;i++)
    {
        sum+=o_freq[i];
    }

    ex_f=sum/n;

    for(i=0;i<n;i++)
    {
        e_freq[i]=ex_f;

        printf("Expected frequency: %0.3f \n",e_freq[i]);
    }

    for(i=0;i<n;i++)
    {
        c_cal+=(o_freq[i]-e_freq[i])*(o_freq[i]-e_freq[i])/e_freq[i];

        printf("the chi-square table value:%f",c_cal);
    }
}

```

```
printf("Enter the chi-square table value:");  
scanf("%f",&c_tab);  
if (c_cal < c_tab)  
{  
    printf("The table value is %f and the calculated value is %0.3f.Accept H0. There is no significant  
difference in claim at %d d.f", c_tab, c_cal, n-1);  
}  
else  
{  
    printf("The table value is %f and the calculated value is %0.3f Reject H0. There is significant  
change in claim at %d d.f",c_tab, c_cal, n-1);  
}  
getch();  
}
```