

```


#include<stdio.h>

int main()
{
    int g[100],h[100],i,x,y,j;
    printf("Enter elements in group G\n");
    for(i=0;i<100;i++)
    {
        printf("Enter 1 to enter new element else 0 then enter the element :");
        scanf("%d",&x);
        if(x==1)
        {
            scanf("%d",&g[i]);
            i++;
        }
        if(x==0)
            break;
    }
    printf("Enter elements in group H\n");
    for(j=0;j<100;j++)
    {
        printf("Enter 1 to enter new element else 0 then enter the element :");
        scanf("%d",&y);
        if(y==1)
        {
            scanf("%d",&h[j]);
            j++;
        }
        if(y==0)
            break;
    }

    printf("\nn(G)/n(H) = %d / %d = %d   {n(G)=Order of group G, n(H)=Order of group H",i,j,i/j);
    if(i%j==0)
        printf("\nLagrange Equation Verified");
}

```

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else  
    printf("\nLagrange Equation Not Verified");  
return 0;  
}
```

input

```
Enter elements in group G  
Enter 1 to enter new element else 0 then enter the element :1 4  
Enter 1 to enter new element else 0 then enter the element :1 3  
Enter 1 to enter new element else 0 then enter the element :1 2  
Enter 1 to enter new element else 0 then enter the element :1 1  
Enter 1 to enter new element else 0 then enter the element :0  
Enter elements in group H  
Enter 1 to enter new element else 0 then enter the element :1 6  
Enter 1 to enter new element else 0 then enter the element :1 5  
Enter 1 to enter new element else 0 then enter the element :0  
  
n(G)/n(H) = 8 / 4 = 2    {n(G)=Order of group G, n(H)=Order of group H  
Lagrange Equation Verified  
  
...Program finished with exit code 0  
Press ENTER to exit console.
```