

求 $s=(a^m)!+(b^n)!$

//凯鲁嘎吉 - 博客园 <http://www.cnblogs.com/kailugaji/>

```
1 #include<stdio.h>
2 void main() {
3     int a, b, m, n, a_m, b_n, sum, power(int, int), fact(int), add(int, int);
4     printf("Please input a, m, b, n :\n");
5     scanf("%d %d %d %d", &a, &m, &b, &n);
6     a_m=fact(power(a, m));    //a_m=(a^m)!
7     b_n=fact(power(b, n));    //b_n=(b^n)!
8     sum=add(a_m, b_n);
9     printf("(a^m)!+(b^n)!=%d\n", a, m, b, n, sum);
10 }
11 //实现求和 x+y
12 int add(int x, int y) {
13     return x+y;
14 }
15 //实现x^y
16 int power(int x, int y) {
17     int i, c;
18     c=x;
19     for(i=1; i<y; i++) {
20         x=x*c;
21     }
22     return x;
23 }
24 //实现求阶乘 n!
25 int fact(int n) {
26     int i, z=1;
27     for(i=1; i<=n; i++) {
28         z=z*i;
29     }
30     return z;
31 }
```

结果为:

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Please input a, m, b, n :

1 5 2 2

$\langle 1^5 \rangle! + \langle 2^2 \rangle! = 25$

Press any key to continue