

An  $n$ -digit number that is the sum of the  $n$ -th powers of its digits is called an  $n$ -narcissistic number. For example, 153 is a 3-narcissistic number since  $153 = 1^3 + 5^3 + 3^3$ , and 1634 is a 4-narcissistic number since  $1634 = 1^4 + 6^4 + 3^4 + 4^4$ .

Please complete the following program that prints the sum of all  $n$ -narcissistic numbers.

```

#include <stdio>
long long cost[10], ans;
int cnt[10], t[10], n;
void dfs(int rest, int now, long long current) {
    if (rest == 0) {
        long long temp = current;
        for (int i = 0; i < 10; i++)
            t[i] = 0;
        while (temp > 0) {
            ++t[temp % 10];
            temp /= 10;
        }
        bool flag = 1;
        for (int i = 0; i < 10; i++)
            if (cnt[i] != t[i]) {
                flag = 0;
                break;
            }
        if (flag) {
            ans+=current 2分 ;
        }
        return;
    }
    if ( current<0 2分 ) {
        return;
    }
    for (cnt[now] = 0; cnt[now] <= rest; cnt[now]++)
        dfs(rest - cnt[now], now + 1, current-cnt[now]*cost[now] 2分 );
    cnt[now] 2分 = 0;
}
int main()
{
    scanf("%d", &n);
    for (int i = 0; i < 10; i++) {
        cost[i] = 1;
        for (int j = 0; j < n; j++)
            cost[i] *= i;
    }
    dfs( n, 0, 10^n 2分 );
    printf("%lld\n", ans);
    return 0;
}

```

The function `LL_Rotation` is to do left-left rotation to the trouble-finder tree node `T` in an AVL tree.

```
typedef struct TNode *Tree;
struct TNode {
    int key, h;
    Tree left, right;
};

Tree LL_Rotation( Tree T )
{
    Tree L;

    L = T->left;
    T->left = L->right;
    L->right = T;
    /* Update heights */
    T->h = maxh(Height(T->left), Height(T->right)) + 1;
    L->h = maxh(Height(L->left), Height(L->right))+1;

    return L;
}
```

评测结果 **答案正确**

得分 12 分



概览



题目列表



提交列表



排名

< 提交列表

|                   |                |                     |
|-------------------|----------------|---------------------|
| 题目                | 用户             | 提交时间                |
| 程序填空题             | 3230100607 庞星磊 | 2024/11/12 10:34:53 |
| 状态 <span>?</span> | 分数             | 评测时间                |
| 部分正确              | 16 / 22        | 2024/11/12 10:35:27 |

| 5-1-1  |                             |      | 4 / 10             |
|--|-----------------------------|------|--------------------|
| 填空#  | 答案                          | 结果   | 得分                 |
| 1  | ans+=current                | 答案正确 | 2 / 2              |
| 2  | current<0                   | 段错误  | 0 / 2              |
| 3  | current-=cnt[now]*cost[now] | 答案错误 | 0 / 2              |
| 4  | cnt[now]                    | 答案正确 | 2 / 2              |
| 5  | n,0,10^n                    | 答案错误 | 0 / 2              |
| 编译器输出  |                             |      | <a href="#">收起</a> |
| <pre>a.cpp: In function 'int main()': a.cpp:33:10: warning: ignoring return value of 'int scanf(const char*, ...)' declared with attribute 'warn_unused_result' [-Wunused-result]    33       scanf("%d", &amp;n);             ~~~~~^~~~~~</pre> |                             |      |                    |

| 5-2-1 |  |      | 12 / 12            |
|-------|--|------|--------------------|
| 填空#   | 答案                                     | 结果   | 得分                 |
| 1     | T->left                                | 答案正确 | 6 / 6              |
| 2     | maxh(Height(L->left),Height(答案正确nt))+1 | 答案正确 | 6 / 6              |
| 编译器输出 |  |      | <a href="#">查看</a> |