too_lazy2name ICPC Team Notebook (2018-19)

Contents

1 Shortcuts

1.1 Template CPP

```cpp
#include <bits/stdc++.h>
using namespace std;
/* Template file for Online Algorithmic
   Competitions */
/* Typedefs */
   /* Basic types */
   typedef long long          ll;
   typedef long double        ld;
   typedef unsigned long long ull;
   /* STL containers */
   typedef vector <int>    vi;
   typedef vector <ll>     vll;
   typedef pair <int, int> pii;
   typedef pair <ll, ll>   pll;
   typedef vector < pii >  vpii;
   typedef vector < pll >  vpll;
   typedef vector <string> vs;
   typedef vector < vi >   vvi;
   typedef vector < vll >  vvll;
   typedef vector < vpii > vvpii;
   typedef set <int>       si;
/* Macros */
   /* Loops */
   #define fl(i, a, b)    for(int i(a); i
       <= (b); i ++)
   #define rep(i, n)      fl(i, 1, n)
   #define loop(i, n)     fl(i, 0, n - 1)
   #define rfl(i, a, b)   for(int i(a); i
       >= (b); i --)
   #define rrep(i, n)     rfl(i, n, 1)
   /* Algorithmic functions */
   #define srt(v)         sort((v).begin(),
       (v).end())
```

```cpp
/* STL container methods */
#define pb                push_back
#define mp                make_pair
#define eb                emplace_back
/* String methods */
#define dig(i)            (s[i] - '0')
#define slen(s)           s.length()
/* Shorthand notations */
#define fr                first
#define sc                second
#define re                return
#define sz(x)             ((int) (x).size()
   )
#define all(x)            (x).begin(), (x).
   end()
#define sqr(x)            ((x) * (x))
#define fill(x, y)        memset(x, y,
   sizeof(x))
#define clr(a)            fill(a, 0)
#define endl              '\n'
/* Mathematical */
#define IINF              0x3f3f3f3f
#define LLINF
   1000111000111000111LL
#define PI
   3.14159265358979323
/* Debugging purpose */
#define trace1(x)                    cerr <<
   #x << ": " << x << endl
#define trace2(x, y)                 cerr <<
   #x << ": " << x << " | " << #y << ": "
    << y << endl
#define trace3(x, y, z)              cerr <<
   #x << ": " << x << " | " << #y << ": "
    << y << " | " << #z << ": " << z <<
   endl
#define trace4(a, b, c, d)           cerr <<
   #a << ": " << a << " | " << #b << ": "
   << b << " | " << #c << ": " << c << "
    | " << #d << ": " << d << endl
#define trace5(a, b, c, d, e)        cerr <<
   #a << ": " << a << " | " << #b << ": "
   << b << " | " << #c << ": " << c << "
    | " << #d << ": " << d << " | " << #e
    << ": " << e << endl
#define trace6(a, b, c, d, e, f) cerr <<
   #a << ": " << a << " | " << #b << ": "
   << b << " | " << #c << ": " << c << "
    | " << #d << ": " << d << " | " << #e
   << ": " << e << " | " << #f << ": "
```

```cpp
        << f << endl
    /* Fast Input Output */
    #define FAST_IO                    ios_base
        ::sync_with_stdio(false); cin.tie(0);
        cout.tie(0)
/* Constants */
    const ll MOD = 1000000007LL;
    const ll MAX = 100010LL;
/* Templates */
template<class T> T abs(T x) { re x > 0 ? x :
    -x; }
template<typename T> T gcd(T a, T b){ if(b ==
    0) return a; return gcd(b, a % b); }
template<typename T> T power(T x, T y, ll m =
    MOD){T ans = 1; x %= m; while(y > 0){ if(
    y & 1LL) ans = (ans * x)%m; y >>= 1LL; x =
    (x*x)%m; } return ans%m; }
```

```cpp
int main(){
    #ifndef ONLINE_JUDGE
    freopen("/Users/sahilbansal/Desktop/input
        .txt","r",stdin);
    freopen("/Users/sahilbansal/Desktop/
        output.txt","w",stdout);
    freopen("/Users/sahilbansal/Desktop/error
        .txt","w",stderr);
    #endif
    FAST_IO;

    return 0;
}
```