

- 手写快读，快写
- $(a/b)\%mod$
- 离散化

## 手写快读，快写

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```
int read() {
    int res = 0;
    char c = getchar();
    while(!isdigit(c)) c = getchar();
    while(isdigit(c)) res = (res << 1) + (res << 3) + c - 48, c = getchar();
    return res;
}

void printi(int x) {
    if(x / 10) printi(x / 10);
    putchar(x % 10 + '0');
}
```

## $(a/b)\%mod$

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$$(a/b)\%mod = (a * ksm(b, mod-2))\%mod$$

## 离散化

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```
std::vector<int> tmp(arr); // tmp 是 arr 的一个副本
std::sort(tmp.begin(), tmp.end());
tmp.erase(std::unique(tmp.begin(), tmp.end()), tmp.end());
for (int i = 0; i < n; ++i)
    arr[i] = std::lower_bound(tmp.begin(), tmp.end(), arr[i]) - tmp.begin();
```