

Result directory structure

Results are organized via the n, k, m variables. Starting from the outermost directory:

```
.
\---n500000000
  +---k100
    +---m150      n500000000_k100_m150
    .
    .
    \---m2        n500000000_k100_m2
  .
  .
  \---k2
    +---m150      n500000000_k2_m150
    .
    .
    \---m2        n500000000_k2_m2
```

Sample Code

```
#include "partproject.h"

void main()
{
    //used by sample
    int i, total;

    partopen("filename");

    // variables that are available
    // - n = the total number of items (from b_k(0) mod m to b_k(n-1) mod m) as
    //       integer
    // - k = the k for b_k as integer
    // - m = the m for the mod as integer
    // - parts = array of shorts holding the results of the b_k functions
    //       NOTE: in almost all cases a short can be used like an integer

    // lets count the number of items that are equally divisible by m
    for (i = 0; i < n; i++)
    {
        if (parts[i] % m == 0)
            total++;
    }

    //print out the total
    printf("%d", total);

    return 0;
}
```

How to create a C program to use a result

1. Create a C program with the sample description.
2. Copy the header file ("partproject.h") into the same directory as the c file
3. Copy the result file you want to search through into the same directory as the other two files
4. Compile the program with gcc and add "-I." to the list of arguments. For example, if your original gcc command line is as follows:

```
gcc -ocprog cprog.c
```

Modify it to as follows:

```
gcc -I. -ocprog cprog.c
```

Result file format

	0	1	2	3
0	<i>n</i> as integer			
4	<i>k</i> as integer			
8	<i>m</i> as integer			
12	<i>parts</i> [0] as short		<i>parts</i> [1] as short	
...	...			
12 + (<i>n</i> *2) - 4	<i>parts</i> [<i>n</i> -2] as short		<i>parts</i> [<i>n</i> -1] as short	