

Advanced practical Programming for Scientists

Thorsten Koch

Zuse Institute Berlin

TU Berlin

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One Program is not reading the data from a file.
Bit field approach to accessing the bit vector.
Indentation

calling find_solutions from reader

```
char delimiter[2] = " \0";
```

```
float rhs;
```

```
n = strtol(s, NULL, 10);  
assert(n > 0); assert(n <= MAX_MATRIX_SIZE);
```

```
printf("Usage: ex4 filename\n");
```

```
struct{  
    int** conss;  
    int* rhs;  
    int nconss;  
    int nvars;  
} typedef BIP;
```

```
int process_file( const char* filename, ROW*** matrix, int* rows, int* cols )
```

```
if (lines == 1) ...
```

```
= (int *)malloc(*cols * sizeof(int));

{
    fprintf(stderr, "out of memory\n");
    exit(0);
}

/* FIXME too simple, are there any other properties to check? */
bool lp_is_valid(LinearProgram* lp) {
    return lp->cols && lp->rows && lp->matrix && lp->vector;
}
```

main() in the middle of the file

```
for (i = 0; i < c->numberOfConstraints; i++) {
```

Do not use tabs in files.

```
strlen(argv[1]) <= 0
```

```
for (int i = 0; i < pow(2, columns); i++) {
```

```
A=static_cast<int*>(allocate(32*32, sizeof(A[0])));
```

How to get the permutations.

Extend the program from the previous week in the following way:

- it should be able to cope with all kinds of inputs and either work or give an error message. It should never crash.
- it should be able to work with $\geq$, $\leq$, and $=$.
- It should measure computing time for the enumeration.
- split into more than one file
(if not already done so (allocate.c does not count)).
- make the code compile to use either `int` or `double` for the coefficients and rhs.

<http://0hh1.com/>

- How to solve
- Testcases
 - Data structures
 - Data passing
 - How to read