

E01 - C program for file generation

Implement a C program that:

- takes from the command line two integer numbers n1, n2,
- allocates two vectors v1 and v2, of dimensions n1 and n2, respectively,
- fills v1 with n1 random even integer numbers between 10-100,
- fills v2 with n2 random odd integer numbers between 21-101,
- sort v1 and v2 (increasing values),
- save the content of vectors v1 and v2 in two text files fv1.txt and fv2.txt, respectively,
- save the content of vectors v1 and v2 in two binary files fv1.b and fv2.b, respectively, Use command *od* for verifying the content of files v1, v2.

Standard ANSI C

```
FILE *fpw; // file pointer
if ((fpw = fopen (filename, "wb")) == NULL){ // w for write,
b for binary
fprintf(stderr," error open %s\n", filename);
return(1);
}
fwrite(buffer,sizeof(buffer),1, fpw); // write sizeof(buffer)
bytes from buffer
```

Using Unix system calls

```
#include <unistd.h>
#include <fcntl.h>
int fdo; // file descriptor
if ((fdo = open(filename, O_WRONLY)) < 0){
fprintf(stderr," error open %s\n", filename);
return 1;
}
write(fdo, buffer, sizeof(buffer));
```