In this lab you have to write a sorting program. Don't use inbuilt function of Ubuntu rather make your own function. Although you have learnt many sorting programs in previous C labs but difference here is that you will sort structures instead of single input numbers. Input will be a file and output will also be stored in file. Your input looks something like this:

1234: 1 2 5 7 8

Here the number before colon is "key" and rest of numbers are simply associated with that key. You will sort on base of key only and rest of numbers will remain same. For example if we have three numbers like:

(1) 3: 1 2 5 (2) 8: 13 7 9 (3) 2: 12 56 2

After sorting in ascending order they will be like:

(1) 2: 12 56 2 (2) 3: 1 2 5 (3) 8: 13 7 9

Observe that only key is sorted rest of numbers remain same.

Such kind of input is stored in structure like this:

```
#define NUMRECS (24)
typedef struct __rec_t {
   unsigned int key;
   unsigned int record[NUMRECS];
} rec_t;
```

The size of rec_t is 100 bytes in which four bytes is for key and rest of bytes for remaining numbers. File of structures to be sorted will be created by generate.c. Make a function named fastsort.c to sort file made by generate.c and place results in output file.

Precaution:

1. Produce error on giving wrong or missing input/output file from command line.
2. Exit properly if any assertion is not fulfilled.
3. Carefully use malloc and make sure to clean using exit if malloc fails.