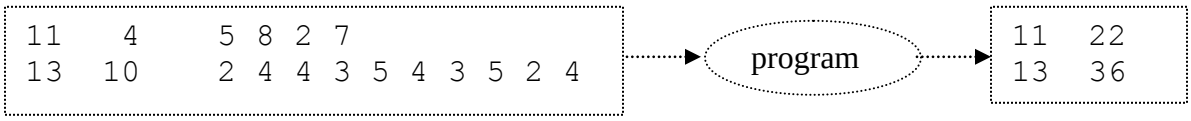
Name:……  Q6

**CS2123 Data Structures**

1. (5pt) Suppose we have an employee data file (say emp.txt) containing the followings in each line per employee: *employee ID*, *how many days he/she worked*, and *how many hours he/she worked in each day*. Complete the following program that can read emp.txt file and print out the *employee ID* and *total number of hours* for each employee into an output file (say out.txt). For example, here is a sample **`emp.txt`** file with two employees and the expected **`out.txt`** file (an actual file may have more lines or days, so your program should be general enough to work with other files containing different number of employees or days):




```
#include <stdio.h>
int main(void)
{
  FILE *infp, *outfp;
  int ID, NumD, hour;
  int i, total;          /* if needed you can declare other variables here */
```

2. (5pt) Write a program that reads a given text file line by line and prints out the lines that contain a given keyword along with the line numbers in the input file.

The input file name and the keyword will be given as command line arguments.

Here is an **example**. Suppose we have the following lines in `input.txt`

```
this file has many words in many lines
some words are the important keywords
try to  find the lines
that contain your keyword
ignore the other lines
```

When we execute your `prog` as follows

```
>  prog input.txt word
```

it should print out the following lines on the screen

```
Line 1: this file has many words in many lines
Line 2: some words are the important keywords
Line 4: that contain your keyword
```

If needed, you can assume that the length of a line is less than 255 characters.

Also suppose the following function is available. If needed, you can use it in your program.

```
int substrindex(char *str, char *substr);
```

which returns -1 if `substr` is not in `str`; otherwise, it returns an index value showing where `substr` starts in `str`. This function expects both `str` and `substr` to be null terminated strings.

*Implement your program in the next page.*

Name.....

```
#include <stdio.h>

#include <string.h>
```