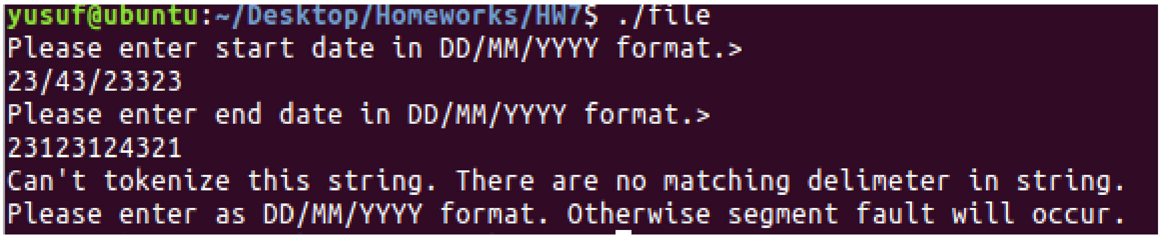
CSE 102 HW07 PART2 EXPLANATION

Taking the Input and Parsing it:

In our homework we take 2 strings as input. They're start date and end date. We take those inputs in DD/MM/YYYY format for example (28/08/1996). I wrote a separator function to parse these two dates. For example my function takes one string as input argument and returns three strings as output argument. These three strings are DD, MM and YYYY. So I wrote another function to find numerical values of these strings. Finally I get the day, month and the year as integer.

Also I made some error handling operations in my homework. For example if user enters the date without "/" separator. I gave an error message. Since my tokenizer function is not capable as strtok I could get segmentation error so I didn't let this happen:



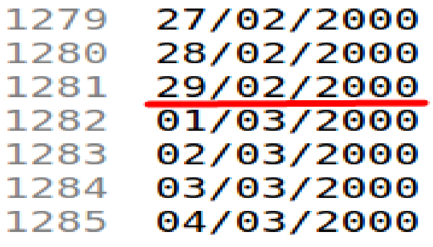
```
yusuf@ubuntu:~/Desktop/Homeworks/HW7$ ./file
Please enter start date in DD/MM/YYYY format.>
23/43/23323
Please enter end date in DD/MM/YYYY format.>
23123124321
Can't tokenize this string. There are no matching delimeter in string.
Please enter as DD/MM/YYYY format. Otherwise segment fault will occur.
```

Writing all dates into input_date.txt:

Now I got 6 integer variables. StartDay, StartMonth, StartYear, EndDay, EndMonth, EndYear.

I wrote a loop with switch case which prints all the dates into input_txt. While writing this dates all months have unique days like April is 30 and May is 31.

Also I checked the leap year for February:

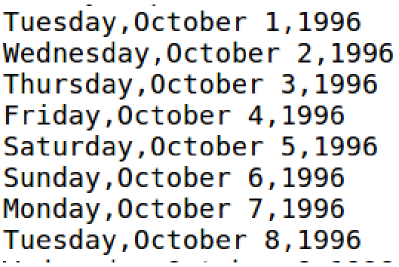


```
27/02/2000
28/02/2000
29/02/2000
01/03/2000
02/03/2000
03/03/2000
04/03/2000
```

:

Reading from input_date.txt and writing into new_date.txt:

In this section I wrote one line from input_date.txt and write formatted into new_date.txt. This loop continues till the input_date.txt reaches End of File character (EOF). In formatted file we have to write day name of that date also. I could choose a constant date, for example in 1 January 1900 it was Monday. But in this way my code could work incorrect because if user enters a date like 1881 it will show wrong day name. So I made a little search. There was couple algorithms to find the day name of date. I understand Lewis Carroll's method and implemented in C programming language. Here example of some lines:



```
Tuesday,October 1,1996
Wednesday,October 2,1996
Thursday,October 3,1996
Friday,October 4,1996
Saturday,October 5,1996
Sunday,October 6,1996
Monday,October 7,1996
Tuesday,October 8,1996
```

References:

https://en.wikipedia.org/wiki/Determination_of_the_day_of_the_week#Implementation-dependent_methods