

CSE102 – Computer Programming (Spring 2018)

Homework #7

Part 2:

```
    • int leap(int year){
/*Function that finds the leap year. */
/* If year%4==0, it is leap year.*/
    • int find_day_limit(int year, int month){
/*The function that returns the number of days in different months.*/
    • void date(){
/* Function that prints dates to terminal and file.*/
/*Enter a first date.*/
/*Enter a end date.*/
/*Increase the year_counter according to the circumstance in the loop and
conditions.*/
* Increase the month_counter according to the circumstance in the loop and
conditions.*/
/* Increase the day_counter according to the circumstance in the loop and
conditions.*/
/*Add zeros as per conditions to print dates correctly*/
    • int find_day(int month1, int year1, int day1){
/*The function that finds out which day of the week is the first day entered.*/
/* http://mathforum.org/dr.math/faq/faq.calendar.html */
/*According to the given form on the map, synchronize the month numbers to
the two missing numbers*/
/*Find the last two digits of the first year.*/
/*Find the first two digits of the first year.*/
/*Since we have reduced the month by two, the January and February months
have remained in the other year. So we wrote this for the condition.*/
/* Formula for finding the day.*/
/*If the result is negative, add 7 to the positive return.*/
/*Get mod(for 7). Rotate result.*/
    • int find_months(int month1){
/*Function that returns month numbers.*/
    • void print_date(){
/*Function that prints the dates clearly.*/
/* Open files.*/
*Take it in every line until the end of the file..*/
/* Call the finds_months function.*/
/* Call the find_day function.*/
/*Print dates to file and terminal according to conditions.*/
/* Close files.*/
    • int main(){
/* Call functions.*/
```

Examples:

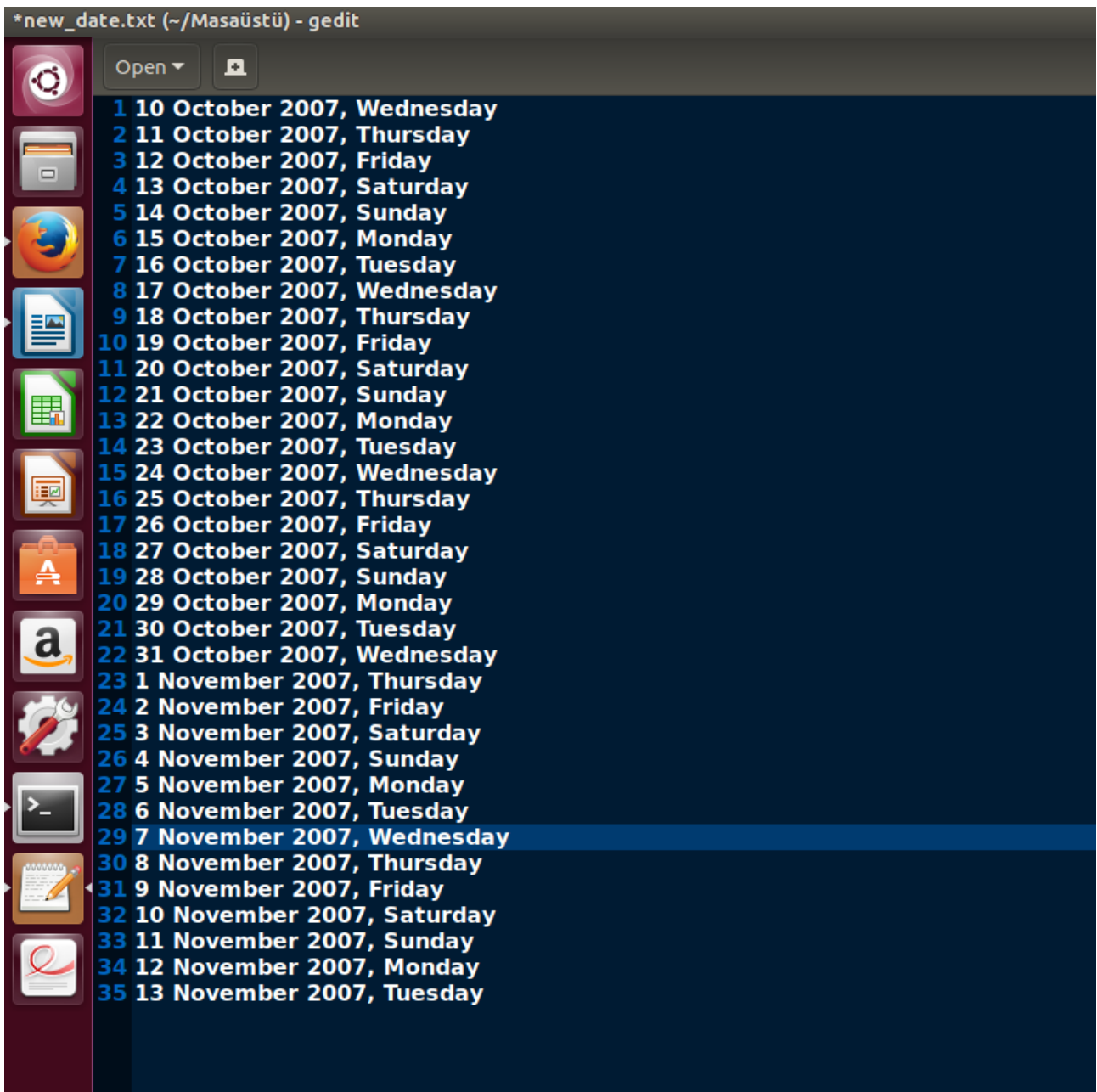
10/10/2007-13/11/2007:

```
miray@miray-VirtualBox: ~/Masaüstü
miray@miray-VirtualBox:~/Masaüstü$ gcc 161044023.c -o 161044023
miray@miray-VirtualBox:~/Masaüstü$ ./161044023
Enter a first day:10
Enter a first month:10
Enter a first year:2007
Enter a end day:13
Enter a end month:11
Enter a end year:2007
10/10/2007
11/10/2007
12/10/2007
13/10/2007
14/10/2007
15/10/2007
16/10/2007
17/10/2007
18/10/2007
19/10/2007
20/10/2007
21/10/2007
22/10/2007
23/10/2007
24/10/2007
25/10/2007
26/10/2007
27/10/2007
28/10/2007
29/10/2007
30/10/2007
31/10/2007
01/11/2007
02/11/2007
03/11/2007
04/11/2007
05/11/2007
06/11/2007
07/11/2007
08/11/2007
09/11/2007
10/11/2007
11/11/2007
12/11/2007
13/11/2007
10 October 2007, Wednesday
11 October 2007, Thursday
12 October 2007, Friday
13 October 2007, Saturday
14 October 2007, Sunday
15 October 2007, Monday
16 October 2007, Tuesday
17 October 2007, Wednesday
18 October 2007, Thursday
19 October 2007, Friday
20 October 2007, Saturday
```

File of input_date.txt:

```
input_date.txt (~/Masaüstü) - gedit
1 10/10/2007
2 11/10/2007
3 12/10/2007
4 13/10/2007
5 14/10/2007
6 15/10/2007
7 16/10/2007
8 17/10/2007
9 18/10/2007
10 19/10/2007
11 20/10/2007
12 21/10/2007
13 22/10/2007
14 23/10/2007
15 24/10/2007
16 25/10/2007
17 26/10/2007
18 27/10/2007
19 28/10/2007
20 29/10/2007
21 30/10/2007
22 31/10/2007
23 01/11/2007
24 02/11/2007
25 03/11/2007
26 04/11/2007
27 05/11/2007
28 06/11/2007
29 07/11/2007
30 08/11/2007
31 09/11/2007
32 10/11/2007
33 11/11/2007
34 12/11/2007
35 13/11/2007
```

File of new_date.txt:



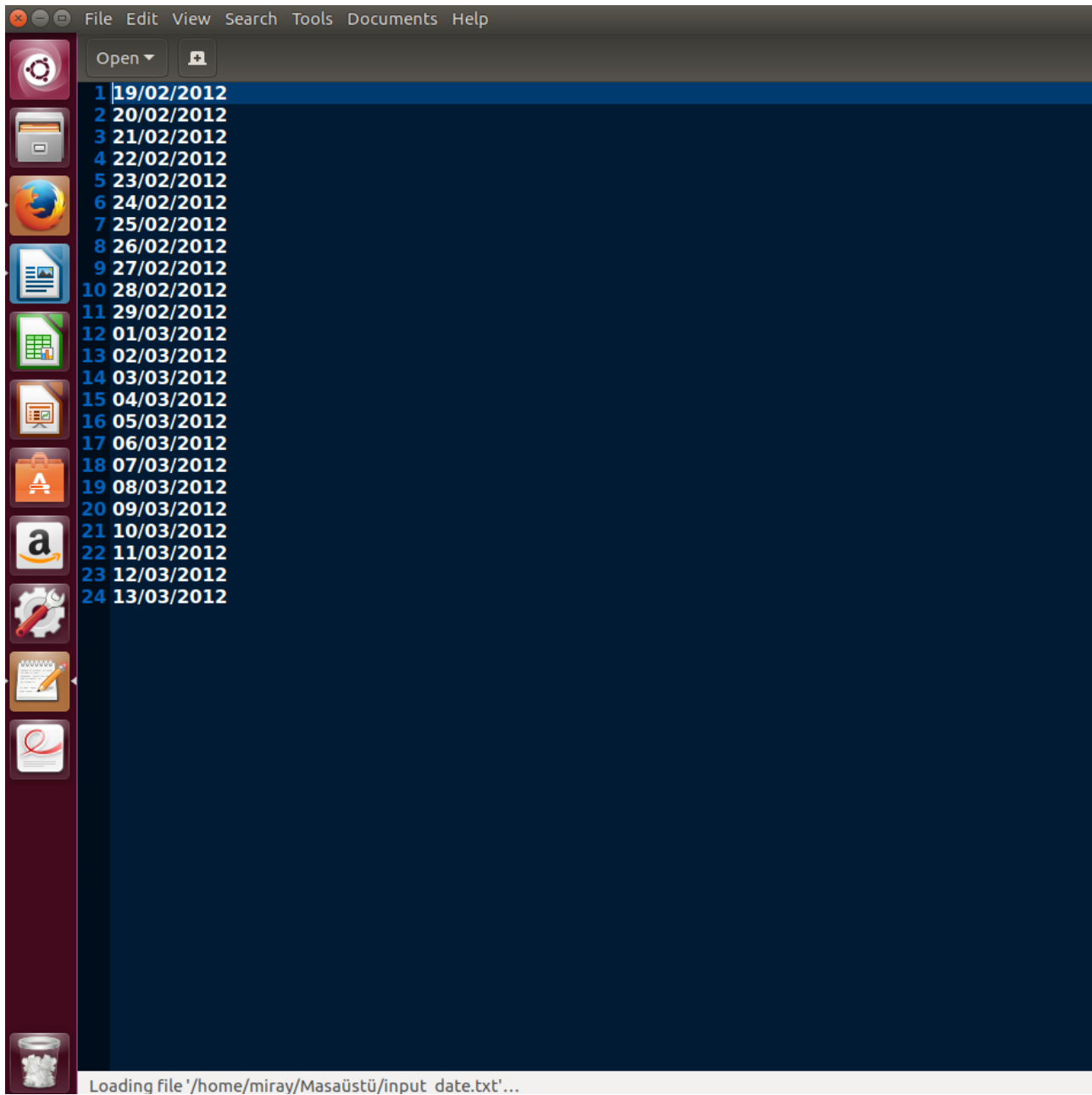
The screenshot shows a gedit text editor window titled "*new_date.txt (~/.Masaüstü) - gedit". The window has a dark blue background and a vertical toolbar on the left with icons for various applications. The text content is a list of dates from October 10, 2007, to November 13, 2007, with each line numbered from 1 to 35. The text is white on a dark blue background. The line "7 November 2007, Wednesday" (line 29) is highlighted with a blue background.

```
*new_date.txt (~/.Masaüstü) - gedit
1 10 October 2007, Wednesday
2 11 October 2007, Thursday
3 12 October 2007, Friday
4 13 October 2007, Saturday
5 14 October 2007, Sunday
6 15 October 2007, Monday
7 16 October 2007, Tuesday
8 17 October 2007, Wednesday
9 18 October 2007, Thursday
10 19 October 2007, Friday
11 20 October 2007, Saturday
12 21 October 2007, Sunday
13 22 October 2007, Monday
14 23 October 2007, Tuesday
15 24 October 2007, Wednesday
16 25 October 2007, Thursday
17 26 October 2007, Friday
18 27 October 2007, Saturday
19 28 October 2007, Sunday
20 29 October 2007, Monday
21 30 October 2007, Tuesday
22 31 October 2007, Wednesday
23 1 November 2007, Thursday
24 2 November 2007, Friday
25 3 November 2007, Saturday
26 4 November 2007, Sunday
27 5 November 2007, Monday
28 6 November 2007, Tuesday
29 7 November 2007, Wednesday
30 8 November 2007, Thursday
31 9 November 2007, Friday
32 10 November 2007, Saturday
33 11 November 2007, Sunday
34 12 November 2007, Monday
35 13 November 2007, Tuesday
```

19/02/2012-13/03/2012:

```
miray@miray-VirtualBox: ~/Masaüstü
Enter a first month:2
Enter a first year:2012
Enter a end day:13
Enter a end month:3
Enter a end year:2012
19/02/2012
20/02/2012
21/02/2012
22/02/2012
23/02/2012
24/02/2012
25/02/2012
26/02/2012
27/02/2012
28/02/2012
29/02/2012
01/03/2012
02/03/2012
03/03/2012
04/03/2012
05/03/2012
06/03/2012
07/03/2012
08/03/2012
09/03/2012
10/03/2012
11/03/2012
12/03/2012
13/03/2012
19 February 2012, Sunday
20 February 2012, Monday
21 February 2012, Tuesday
```

File of input_date.txt:



File of new_date.txt:

```
new_date.txt (~/Masaüstü) - gedit
Open ▾
1 19 February 2012, Sunday
2 20 February 2012, Monday
3 21 February 2012, Tuesday
4 22 February 2012, Wednesday
5 23 February 2012, Thursday
6 24 February 2012, Friday
7 25 February 2012, Saturday
8 26 February 2012, Sunday
9 27 February 2012, Monday
10 28 February 2012, Tuesday
11 29 February 2012, Wednesday
12 1 March 2012, Thursday
13 2 March 2012, Friday
14 3 March 2012, Saturday
15 4 March 2012, Sunday
16 5 March 2012, Monday
17 6 March 2012, Tuesday
18 7 March 2012, Wednesday
19 8 March 2012, Thursday
20 9 March 2012, Friday
21 10 March 2012, Saturday
22 11 March 2012, Sunday
23 12 March 2012, Monday
24 13 March 2012, Tuesday
```

