

Department of Computer Science and Engineering
Bangladesh University of Engineering and Technology
CSE 106 : Structured Programming Language
Offline Assignment for EID

1. Write a program to implement big integer calculator in c. You have to use character array to represent big integer. The program should support plus, minus, multiplication and division of big integers.

Ex.

Enter First Int:

654498765413216546579876546543132163546546579879846543651321321654679787987465
4654132132132165749879646543213216546

Enter Second Int:

654498765413216546579876546543132163546546579879846543651321321654679787987465
4654132132132165749879646543213216546

Your Possible Options:

1. Add
2. Sub
3. Mul
4. Div

Option : 4

Division of num1 and num2 is 1

Do want to continue? (y/n) y

Option : 2

Subtraction of num1 and num2 is 0

Do want to continue? (y/n) n

Remember $2-4 = -2$, $2*-7 = 14$

Shahrear

2. Write a C program that displays twelve-month calendar for a particular year. The program should prompt the user for the year to be printed, and then it should figure out (a) whether the year is a leap-year and (b) what day of the week the chosen year starts on.

The calendar should be formatted as shown in the sample execution below. Note that numbers the days must be right-justified under the names of the days and that two spaces separate the names of the days from each other.

Assumptions and Restrictions

The user may enter any non-negative integer for the year. You must calculate the calendar according to the modern international standard calendar that was introduced by Pope Gregory XIII in the year 1582. For input years earlier than 1582, calculate them as if the modern calendar were in effect.

In the modern calendar, years that are divisible by 4 are leap years, except that years divisible by 100 are not leap years unless they are also divisible by 400. That is, there are 97 leap years every four centuries.

You will have to figure out what day of the week the calendar starts on. You may do this by referring to a known year in which you know the day of the week of a particular date. You will then work backwards from that known date to find the start of the input year.

Sample Execution

MONTHLY CALENDAR

Please enter year for this calendar:- 2009

*** CALENDAR for 2009 ***

January 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

February 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
			.			
			.			
			.			

3. (output continues for all 12 months)