

Practice Problem

1. You are given three integer number as input. Say for example a & b & c. You have to swap the values circularly among them.

say for example

a = 5

b = 6

c = 7

The value for modified a, b, c should be

a = 7

b = 5

c = 6

The constraint for this problem is that you cannot use more than one temporary variable.

Sample Input format:

1. Take 3 integer number as input a, b, c.

Sample output format:

1. a = value of c
b = value of a
c = value of b

Sample Input/Output

Sample Input	Sample Output
5 6 7	a = 7 b = 5 c = 6
100 -10 50	a = 50 b = 100 c = -10

2. You are given date of birth and date of death of a person as input. You have to find the approximate age of the person as year month days format

Consider :

1 month = 30 days

1 year = 365 days

You can't consider 1 year = 12 month (it will raise conflict)

Sample input format:

You have to take 6 number as input.

1. dd mm yyyy correspond to format day month year of a date. The first three number will be consider as date of birth
2. the second 3 numbers will be considered as date of death
3. You can assume valid date will be given as input.

Sample output format:

1. Age of the person with format (year month days)

Sample Input/Output:

Sample Input	Sample Output
15 2 2014 30 1 2016	1 year 11 month 20 days

3. You are given two number of one digit length as character input. You have to find the addition , subtraction and multiplication value of the numbers.

Constraint : you have to take the input as character value. Using scanf / getchar/ getch

Sample Input format :

two characters **a** and **b** as input.

Sample Output format:

Convert the character into numbers and then apply addition, multiplication and subtraction.

Sample Input	Sample Output
5 6	addition : 11 subtraction : -1 multiplication : 30
7 8	addition : 15 subtraction : -1 multiplication : 56

4. You are given a character **ch** and a integer number **n** as input. You have to find the **nth** previous number of the given character. In case the number **n** point past the character **a** you have to start with z rotationally.

For example for sample input (e 3) you have to find previous 3rd character which is b.
In case if your input is like (b 3) your given output will be z.

Sample Input format:

1. Two inputs : a character ch followed by an integer number n

Sample Output Format:

1. the nth previous character output.

Sample Input	Sample Output
x 4	t
a 2	y
e 3	b

5. You are given floating number **x** as input. The input **x** will be always a negative number. You need to find smallest integer not less than **x** or ceil of negative number and nearest integer of number **x** or round of **x**.

Sample Input Format:

1. A negative floating point number

Sample Output Format:

2. you have to output ceil and round of number **x**. Print format will be,
ceil **x** : ceil_value
round **x** : round_value

Sample Input/Output:

Sample Input	Sample Output
-3.2	ceil -3.2 : -3 round -3.2 : -3
-3.6	ceil -3.6 : -3 round -3.6 : -4

Bonus Problems:

1. Take two integer numbers as input. You have to swap the value of the two variables **without using any temporary variables**.

Sample Input	Sample Output
5 6	6 5
7 100	100 7

2. You are given 3 numbers as input. The first two correspond to day of the month and which day of the week.

For example (15 3) means 15th day of a month and 3 means wednesday as you can find from the provided table.

The third input will be query day asking what will be the weekday of the corresponding day of the month.

For example

if 15th day of a month is wednesday the 20th day of the month will be monday (code 1)

So for input,

15 3

20

output will be 1.

0	sunday
1	monday
2	tuesday
3	wednesday

4	thursday
5	friday
6	saturday

Sample Input format:

1. Three integer numbers as input.

Sample Output format:

1. Find the query day of the week.

Sample Input/Output:

Sample Input	Sample Output
15 3 20	1
15 3 14	2
18 1 22	5