

# 計算機程式語言

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## Chapter 3\_project 1

Write a program that accepts a date from the user in the form mm/dd/yy and then displays it in the form yyymmdd:

```
Enter a date (mm/dd/yy): 2/17/2011
```

```
You entered the date 20110217
```

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C chap3\_1.c

```
1  #include <stdio.h>
2
3  int main(void) {
4
5      int year, month, day;
6
7      printf("Enter a date (mm/dd/yyyy): ");
8      scanf("%d/%d/%d", &year, &month, &day);
9
10     printf("You entered the date %d/%d/%d\n", year, month, day);
11     return 0;
12 }
```

## Chapter 3\_project 2

Write a program that formats product information entered by the user. A session with the program should look like this:

Enter item number: 583

Enter unit price: 13.5

Enter purchase date (mm/dd/yyyy): 10/24/2010

Item	Unit Price	Purchase Date
583	\$ 13.50	10/24/2010

The item number and date should be left justified; the unit price should be right justified. Allow dollar amounts up to \$9999.99.

Hint: Use tabs to line up the columns.

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# Solution

```
10
11 #include <stdio.h>
12
13 /* Note : Tab stops are assumed to be eight characters apart.*/
14
15 int main(void)
16 {
17     int item_number, month, day, year;
18     float unit_price;
19
20     printf("Enter item number : \n");
21     scanf("%d", &item_number);
22
23     printf("Enter unit_price : \n");
24     scanf("%f", );
25
26     printf("Enter purchase date : (mm/dd/yyyy)\n");
27     scanf("%d/%d/%d", &month, &day, &year);
28
29     printf("\nItem\t\tUnit\t\tPurchase\n");
30     printf("\t\tPrice\t\tDate\n");
31     printf();
32
33     return 0;
34 }
35
```

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## Chapter 3\_project 4

Write a program that prompts the user to enter a telephone number in the form (xxx) xxx-xxxx and then displays the number in the form xxx.xxx.xxx:

Enter phone number [(xxx) xxx-xxxx]:(404) 817-6900

You entered 404.817.6900

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# Solution

```
10
11 #include <stdio.h>
12
13
14 int main(void)
15 {
16     int area_code, prefix, number;
17     float unit_price;
18
19     printf("Enter phone number [(xxx) xxx-xxxx] : ");
20     scanf("%d-%d-%d", &area_code, &prefix, &number);
21
22     printf("Area code: %d, Prefix: %d, Number: %d\n", area_code, prefix, number);
23
24     return 0;
25 }
26
```

## Chapter 3\_project 6

Modify the addfrac. c program of Section 3.2 so that the user enters both fractions at the same time, separated by a plus sign:

Enter two fractions separated by a plus sign: 5/6+3/4

The sum is 38/24

(不必約分)





# Solution

```
10
11  #include <stdio.h>
12
13
14  int main(void)
15  {
16      int num1, denom1, num2, denom2, result_num, result_denom;
17
18      printf("Enter two fractions separated by a plus sign : \n");
19      scanf("%d/%d+%d/%d", &num1, &denom1, &num2, &denom2);
20
21      result_num = ;
22      result_denom = ;
23
24      printf();
25
26      return 0;
27  }
28
```

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