# **Functions**

Programming in C

Shirley B. Chu shirley.chu@delasalle.ph

College of Computer Studies De La Salle University

October 15, 2020

reduce redundancy

2 | 35

- reduce redundancy
- improve readability and understandability

S. B. Chu (DLSU) User-defined functions October 15, 2020 2 | 35

- reduce redundancy
- improve readability and understandability
- reduce complexity

2 | 35

- reduce redundancy
- improve readability and understandability
- reduce complexity
- improve performance

- reduce redundancy
- improve readability and understandability
- reduce complexity
- improve performance
- isolate complex processes

2 | 35

A certain restaurant MyKitchen serves only Fried Chicken rice. A client dines in this restaurant, and specifies the number of Fried Chicken rice he wishes to order. Write a program that generates the receipt for this client.

MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

MyKitchen Taft Avenue, Manila Your Receipt



Date: 1/10/20	021	
Fried Chix Ri 2 x 99.00		198.00
Total 2 ite Sales Tax	em(s)	176.79 21.21
Grand Total		198.00
Tip Guide: 15%= 26.52	18%= 31.82	20%= 35.36

Date: 10/10/2020	
Fried Chix Rice 10 x 99.00	990.00
Total 10 item(s) Sales Tax	883.93 106.07
Grand Total	990.00

Tip Guide: 15%=132.59

18%=159.11 20%=176.79

Thank you very much! See you again! Thank you very much! See you again!

Sales Tax is 12%, and tip is calculated based on the gross amount (before tax). Total number of characters per line is 40.



4 | 35

MyKitchen Taft Avenue, Manila Your Receipt

Tasks:

Date: 1/10/2021

Fried Chix Rice 2 x 99.00 198.00

Total 2 item(s) Sales Tax 21.21 \_\_\_\_\_ Grand Total

198.00

Tip Guide: 15%= 26.52 18%= 31.82

20%= 35.36

Thank you very much! See you again!



MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Tip Guide:

Fried Chix Rice
2 x 99.00 198.00

Total 2 item(s) 176.79
Sales Tax 21.21

Grand Total 198.00

> Thank you very much! See you again!

#### Tasks:

1. Ask for inputs



	MyKit	che	n
Taft	Avenu	ıe,	Manila
,	Your R	tece	ipt

#### Date: (1/10/2021)

Fried Chix Rice
2 x 99.00 198.00

Total 2 item(s) 176.79
Sales Tax 21.21

Grand Total 198.00

Tip Guide: 15%= 26.52 18%= 31.82 20%= 35.36

Thank you very much! See you again!

### Tasks:

- 1. Ask for inputs
  - date



	MyKitchen	
Taft	Avenue, Manila	
,	Your Receipt	

Date: 1/10/2021

Fried Chix Rice
2) 99.00 198.00

Total 2 item(s) 176.79
Sales Tax 21.21

Grand Total 198.00

Tip Guide: 15%= 26.52 18%= 31.82 20%= 35.36

Thank you very much! See you again!

#### Tasks:

- 1. Ask for inputs
  - date
  - number of orders



	MyKitchen	
Taft	Avenue, Manila	
,	our Receipt	

Date: 1/10/2021

Fried Chix Rice 2 x 99.00 Total 2 item(s) Sales Tax \_\_\_\_\_ Grand Total

Tip Guide: 15%= 26.52 18%= 31.82 20%= 35.36

> Thank you very much! See you again!

#### Tasks:

198.00

- 1. Ask for inputs
  - date
  - number of orders



MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice
2 x (99.00) 198.00

Total 2 item(s) 176.79
Sales Tax 21.21

Grand Total 198.00

Tip Guide: 15%= 26.52 18%= 31.82 20%= 35.36

Thank you very much! See you again!

### Tasks:

- 1. Ask for inputs
  - date
  - number of orders

### Known data:

amount per order



	MyK:	itch	en	
Taft	Aver	nue,	Manila	
,	Your	Rece	eint	

Date: 1/10/2021

Tip Guide:

Fried Chix Rice
2 x 99.00 198.0

Total 2 item(s) 176.7

(Sales Tax) 21.2

Grand Total 198.00

2 18%= 31.82 2

Thank you very much!
See you again!

### Tasks:

- 1. Ask for inputs
  - date
  - number of orders

### Known data:

- amount per order
- sales tax is 12%

20%= 35.36



MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice 2 x 99.00 198.00

Total 2 item(s) 176.79
Sales Tax 21.21

Grand Total

115 Guide: 15%= 26.52 (18

18%= 31.82



198.00

Thank you very much! See you again!

#### Tasks:

- 1. Ask for inputs
  - date
  - number of orders

- amount per order
- sales tax is 12%
- tips: 15%, 18%, 20%



MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice
2 x 99.00 198.00

Total 2 item(s) 176.79
Sales Tax 21.21

Tip Guide: 15%= 26.52 18

Grand Total

18%= 31.82 20%= 35.36

Thank you very much! See you again!

### Tasks:

- 1. Ask for inputs
  - date
  - number of orders
- 2. Compute

#### Known data:

- amount per order
- sales tax is 12%
- tips: 15%, 18%, 20%

198.00



MvKitchen Taft Avenue, Manila Your Receipt Date: 1/10/2021 Fried Chix Rice 198.00 2 x 99.00 Total 2 item(s) 176.79 Sales Tax 21.21 Grand Total 198.00 Tip Guide: 15%= 26.52 18%= 31.82 20%= 35.36 Thank you very much! See you again!

#### Tasks:

- 1. Ask for inputs
  - date
  - number of orders
- 2. Compute
  - total price

- amount per order
- sales tax is 12%
- tips: 15%, 18%, 20%



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MyKitchen Taft Avenue, Mani Your Receipt	la
Date: 1/10/2021	
Fried Chix Rice 2 x 99.00	198.00
Total 2 item(s) Sales Tax	176.79 21.21
Grand Total	198.00
Tip Guide: 15%= 26.52 18%= 31.82	20%= 35.36
Thank you very mu See you again!	ch!

#### Tasks:

- 1. Ask for inputs
  - date
  - number of orders
- 2. Compute
  - total price
  - gross amount (amount before tax)

- amount per order
- sales tax is 12%
- tips: 15%, 18%, 20%



4 | 35

MyKitchen Taft Avenue, Manila Your Receipt		
Date: 1/10/2021		
Fried Chix Rice 2 x 99.00	198.00	
Total 2 item(s) Sales Tax	176.79 21.21	
Grand Total	198.00	
Tip Guide: 15%= 26.52 18%= 31.82	20%= 35.36	
Thank you very much See you again!	!	

#### Tasks:

- 1. Ask for inputs
  - date
  - number of orders
- 2. Compute
  - total price
  - gross amount (amount before tax)
  - tax

- amount per order
- sales tax is 12%
- tips: 15%, 18%, 20%



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MyKitchen Taft Avenue, Manil Your Receipt	La
Date: 1/10/2021	
Fried Chix Rice 2 x 99.00	198.00
Total 2 item(s) Sales Tax	176.79 21.21
Grand Total	198.00
Tip Guide: 15%= 26.52 18%= 31.82	20%= 35.36
Thank you very muo See you again!	ch!

#### Tasks:

- 1. Ask for inputs
  - date
  - number of orders
- 2. Compute
  - total price
  - gross amount (amount before tax)
  - tax
  - tips

- amount per order
- sales tax is 12%
- tips: 15%, 18%, 20%



	MyKit	chen	
Taft	Avenu	e, Manila	
,	Your R	eceipt	

Date: 1/10/2021

Fried Chix Rice 2 x 99.00 198.00

Total 2 item(s) 176.79
Sales Tax 21.21

Grand Total 198.00

Tip Guide: 15%= 26.52

18%= 31.82 20%= 35.36

Thank you very much! See you again!

#### Tasks:

- 1. Ask for inputs
  - date
  - number of orders
- 2. Compute
  - total price
  - gross amount (amount before tax)
  - tax
  - tips
- 3. Display receipt

- amount per order
- sales tax is 12%
- tips: 15%, 18%, 20%



MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Tip Guide:

Fried Chix Rice
2 x 99.00 198.00

Total 2 item(s) 176.79
Sales Tax 21.21

Grand Total 198.00

20%= 35.36

2 18%= 31.82 2

Thank you very much!
See you again!

#### Tasks:

- 1. Ask for inputs
  - date
  - number of orders
- 2. Compute
  - total price
  - gross amount (amount before tax)
  - tax
  - tips
- 3. Display receipt

### Known data:

- amount per order
- sales tax is 12%
- tips: 15%, 18%, 20%



Taft Avenue, Manila	
Your Receipt	

Date: 1/10/2021

Tip Guide: 15%= 26.52

Fried Chix Rice 2 x 99.00 198.00 Total 2 item(s) 176.79 Sales Tax 21.21

\_\_\_\_\_ Grand Total 198.00

18%= 31.82

20%= 35.36

Thank you very much! See you again!

#### Tasks:

- 1. Ask for inputs
  - date
  - number of orders
- 2. Compute
  - total price
  - gross amount (amount before tax)
  - tax
  - tips
- 3. Display receipt
  - header

#### Known data:

- amount per order
- sales tax is 12%
- tips: 15%, 18%, 20%



MyKitchen Taft Avenue, Mani Your Receipt	la
Date: 1/10/2021	
Fried Chix Rice 2 x 99.00	198.00
Total 2 item(s) Sales Tax	176.79 21.21
Grand Total	198.00
Tip Guide: 15%= 26.52 18%= 31.82	20%= 35.36
Thank you very mu See vou again!	ch!

### Tasks:

- 1. Ask for inputs
  - date
  - number of orders
- 2. Compute
  - total price
  - gross amount (amount before tax)
  - tax
  - tips
- 3. Display receipt
  - header
  - details

#### Known data:

- amount per order
- sales tax is 12%
- tips: 15%, 18%, 20%



MyKitchen	
Taft Avenue, Manila	
Your Receipt	
Tour necespe	
Date: 1/10/2021	
(	
Fried Chix Rice	–
	_
2 x 99.00 198.0	ט
(	9
Total 2 item(s) 176.7	9
Sales Tax 21.2	1
Grand Total 198.0	a
Grand rotat 190.0	U
Tip Guide:	
15%= 26.52 18%= 31.82 20%= 35.3	6
The state of the s	
Thank you very much!	
See you again!	

#### Tasks:

- 1. Ask for inputs
  - date
  - number of orders
- 2. Compute
  - total price
  - gross amount (amount before tax)
  - tax
  - tips
- 3. Display receipt
  - header
  - details
  - divider

#### Known data:

- amount per order
- sales tax is 12%
- tips: 15%, 18%, 20%



MyKitchen Taft Avenue, Mani Your Receipt	la
Date: 1/10/2021	
Fried Chix Rice 2 x 99.00	198.00
Total 2 item(s) Sales Tax	176.79 21.21
Grand Total	198.00
Tip Guide: 15%= 26.52 18%= 31.82	20%= 35.36

Thank you very much!

See you again!

#### Tasks:

- 1. Ask for inputs
  - date
  - number of orders
- 2. Compute
  - total price
  - gross amount (amount before tax)
  - tax
  - tips
- 3. Display receipt
  - header
  - details
  - divider
  - tip guide

#### Known data:

- amount per order
- sales tax is 12%
- tips: 15%, 18%, 20%



MyKitchen
Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice
2 x 99.00 198.00

Total 2 item(s) 176.79
Sales Tax 21.21

Grand Total

18%= 31.82 20%= 35.36

198.00

Thank you very much! See you again!

### Tasks:

- 1. Ask for inputs
  - date
  - number of orders
- 2. Compute
  - total price
  - gross amount (amount before tax)
  - tax
  - tips
- 3. Display receipt
  - header
  - details
  - divider
  - tip guide
  - footer

#### Known data:

- amount per order
- sales tax is 12%
- tips: 15%, 18%, 20%



MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice 2 x 99.00 198.00

Total 2 item(s) 176.79
Sales Tax 21.21

Grand Total 198.00

Tip Guide: 15%= 26.52

18%= 31.82 20%= 35.36

Thank you very much! See you again!



MyKitchen Taft Avenue, Manila Your Receipt

#include<stdio.h>

2 x 99.00 198.00 Total 2 item(s) 176.79 Sales Tax 21.21

Grand Total 198.00

Tip Guide: 15%= 26.52

18%= 31.82 20%= 35.36

Thank you very much! See you again!



MyKitchen Taft Avenue, Manila Your Receipt

#include<stdio.h>

#define AMOUNT 99.00

Date: 1/10/2021

Fried Chix Rice
2 x (90.00) 198.00

Total 2 item(s) 176.79

Sales Tax 21.21

Grand Total 198.00

> Thank you very much! See you again!

### Known data:

amount per order



MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Tip Guide:

15%= 26.52 18%= 31.82 20%= 35.36

Thank you very much! See you again!

#### Known data:

- amount per order
- sales tax is 12%

#include<stdio.h>

#define AMOUNT 99.00
#define TAX 0.12



MyKitchen Taft Avenue, Manila Your Receipt Date: 1/10/2021

 Fried Chix Rice
 198.00

 2 x 99.00
 198.00

 Total 2 item(s)
 176.79

 Sales Tax
 21.21

 Grand Total
 198.00

(5%) 26.52 (8%) 31.82 (20%) 35.36

Thank you very much!

Thank you very much! See you again!

### Known data:

Tip Guide:

- amount per order
- sales tax is 12%
- tips: 15%, 18%, 20%

#### #include<stdio.h>

#define AMOUNT 99.00 #define TAX 0.12 #define TIP1 0.15 #define TIP2 0.18 #define TIP3 0.20



### #de #de

198.00

MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice 2 x 99.00

Total 2 item(s) 176.79
Sales Tax 21.21

Sates lax 21.21

Grand Total 198.00

Tip Guide: 15%= 26.52

15%= 26.52 18%= 31.82 20%= 35.36

Thank you very much! See you again!

Tasks:

#define AMOUNT 99.00 #define TAX 0.12 #define TIP1 0.15 #define TIP2 0.18 #define TIP3 0.20

#include<stdio.h>



```
#define AMOUNT 99.00
                                    #define TAX 0.12
                                    #define TIP1 0.15
             MyKitchen
                                    #define TIP2 0.18
        Taft Avenue, Manila
            Your Receipt
                                    #define TIP3 0.20
                                    int main ()
Date: 1/10/2021
Fried Chix Rice
   2 x 99.00
                             198.00
Total 2 item(s)
                             176.79
Sales Tax
                             21.21
Grand Total
                             198.00
Tip Guide:
15%= 26.52
             18%= 31.82
                         20%= 35.36
                                          return 0;
        Thank you very much!
           See you again!
```

#### Tasks:

### 1. Ask for inputs

#include<stdio.h>



```
#define AMOUNT 99.00
                                    #define TAX 0.12
                                    #define TIP1 0.15
            MyKitchen
                                    #define TIP2 0.18
        Taft Avenue, Manila
            Your Receipt
                                    #define TIP3 0.20
                                    int main ()
Date: 1/10/2021
                                         int nDate;
Fried Chix Rice
   2 x 99.00
                             198.00
Total 2 item(s)
                             176.79
Sales Tax
                             21.21
Grand Total
                             198.00
Tip Guide:
15%= 26.52
            18%= 31.82
                         20%= 35.36
                                         return 0;
        Thank you very much!
           See you again!
```

#include<stdio.h>

#### Tasks:

- 1. Ask for inputs
  - date



```
MyKitchen
          Taft Avenue, Manila
              Your Receipt
Date: 1/10/2021
Fried Chix Rice
    2 x 99.00
                                 198.00
Total 2 item(s)
                                 176.79
Sales Tax
                                  21.21
Grand Total
                                 198.00
Tip Guide:
15%= 26.52
               18%= 31.82
                             20%= 35.36
          Thank you very much!
             See you again!
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
int main ()
    int nDate;
    printf ("Date: ");
    scanf ("%d", &nDate);
    return 0;
```

#### Tasks:

- 1. Ask for inputs
  - date

## Let's code



```
MyKitchen
          Taft Avenue, Manila
              Your Receipt
Date: 1/10/2021
Fried Chix Rice
    2 x 99.00
                                 198.00
Total 2 item(s)
                                 176.79
Sales Tax
                                  21.21
Grand Total
                                 198.00
Tip Guide:
15%= 26.52
               18%= 31.82
                             20%= 35.36
          Thank you very much!
             See you again!
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TIP2 0.18
#define TIP3 0.20
int main ()
    int nDate;
    int nOrders;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders);
    return 0;
```

#### Tasks:

- 1. Ask for inputs
  - date
  - number of orders

## Let's code



```
MyKitchen
           Taft Avenue, Manila
               Your Receipt
 Date: 1/10/2021
 Fried Chix Rice
     2 x 99.00
                                 198.00
 Total 2 item(s)
                                 176.79
 Sales Tax
                                  21.21
 Grand Total
                                 198.00
 Tip Guide:
 15%= 26.52
               18%= 31.82
                             20%= 35.36
           Thank you very much!
              See you again!
Tasks:
   1. Ask for inputs
   2. Compute
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TIP2 0.18
#define TIP3 0.20
int main ()
    int nDate:
    int nOrders;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders);
    return 0;
```

- total price
- aross amount (amount before tax)
- tax
- tips

returnType functionName (type1 param1, type2 param2, ...)

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- specifies the name of the function
  - is an identifier, usually follows verb-noun format e.g. computeAverage(), multiplyXY()

returnType functionName (type1 param1, type2 param2, ...)

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returnType functionName (type1 param1, type2 param2, ...)

e.g.  $\mathbf{a}$  is a variable;  $\mathbf{a}()$  is a function

8 | 35

User-defined functions October 15, 2020

returnType functionName (type1 param1, type2 param2, ...)

- → formal parameters
  - a.k.a parameter list
  - indicates the type and number of arguments the function expects
  - the parameters receives the data when the function is called

returnType functionName (type1 param1, type2 param2, ...)

- indicates the type of data the function is expected to return
  - returns void if the function does not return a value

- specifies the name of the function
- is an identifier, usually follows verb-noun format e.g. computeAverage(), multiplyXY()

returnType functionName (type1 param1, type2 param2, ...)

- indicates the type of data the function is expected to return
  - returns void if the function does not return a value

#### formal parameters

- a.k.a parameter list
- indicates the type and number of arguments the function expects
- the parameters receives the data when the function is called

e.g. a is a variable; a() is a function

- created by the programmer
- does a specific task
- convention for names: verb-noun pair,
   e.g. getAverage(), displayTitle()

Recall: returnType functionName (type1 param1, type2 param2, ...)

Recall: returnType functionName (type1 param1, type2 param2, ...)

Task: Compute total price

Recall: returnType functionName (type1 param1, type2 param2, ...)

Task: Compute total price

Recall: returnType functionName (type1 param1, type2 param2, ...)

Task: Compute total price

computeTotal (

Recall: returnType functionName (type1 param1, type2 param2, ...)

Task: Compute total price

Recall: returnType functionName (type1 param1, type2 param2, ...)

Task: Compute total price

computeTotal (int nOrders)

Recall: returnType functionName (type1 param1, type2 param2, ...)

Task: Compute total price

computeTotal (int nOrders)

Recall: returnType functionName (type1 param1, type2 param2, ...)

Task: Compute total price

float computeTotal (int nOrders)

```
Recall: returnType functionName (type1 param1, type2 param2, ...)

Task: Compute total price

float computeTotal (int nOrders)
{
```

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```
Recall: returnType functionName (type1 param1, type2 param2, ...)
Task: Compute total price
float computeTotal (int nOrders)
{
    float fTotal;
}
```

```
Recall: returnType functionName (type1 param1, type2 param2, ...)
Task: Compute total price

float computeTotal (int nOrders)
{
    float fTotal;
    fTotal = nOrders * AMOUNT;
}
```

```
Recall: returnType functionName (type1 param1, type2 param2, ...)
Task: Compute total price

float computeTotal (int nOrders)
{
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal;
}
```

```
Recall: returnType functionName (type1 param1, type2 param2, ...)
Task: Compute total price
float computeTotal (int nOrders)
    float fTotal:
    fTotal = nOrders * AMOUNT;
    return fTotal;
or you may also write this as...
float computeTotal (int nOrders)
    return nOrders * AMOUNT;
```

#include<stdio.h>



```
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
int main ()
{
    int nDate;
    int nOrders;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders);
    return 0;
}
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal;
int main ()
    int nDate:
    int nOrders;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders);
   return 0;
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal;
    fTotal = nOrders * AMOUNT:
    return fTotal;
int main ()
    int nDate:
    int nOrders;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders);
    computeTotal ();
    return 0;
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal;
int main ()
    int nDate:
    int nOrders;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders);
    computeTotal ();
    return 0;
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal;
int main ()
    int nDate:
    int nOrders;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders);
    computeTotal (nOrders);
   return 0;
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal;
int main ()
    int nDate:
    int nOrders;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders);
    computeTotal (nOrders);
   return 0;
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal;
int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders);
    computeTotal (nOrders);
    return 0:
```

#include<stdio.h>



```
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal;
int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders);
    fPrice = computeTotal (nOrders);
    return 0:
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
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#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT;
    return fTotal:
int main ()
    int nDate:
    int nOrders:
    float fPrice;
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    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```



```
#include<stdio.h>
#define AMOUNT 99.00
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float computeTotal (int nOrders)
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    fTotal = nOrders * AMOUNT;
    return fTotal;
int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0;
```



main():



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT;
    return fTotal;
int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

 $\frac{\text{main}():}{\text{nDate} = ?}$ 





```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT;
    return fTotal:
int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
main():
nDate = ?
nOrders = ?
```





```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
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    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

main():
nDate = ?
nOrders = ?
fPrice = ?



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
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float computeTotal (int nOrders)
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    int nDate:
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    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
main():
nDate = ?
nOrders = ?
fPrice = ?
```

Date: \_



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
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    fTotal = nOrders * AMOUNT;
    return fTotal:
int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
main():
nDate = ? 10102020
nOrders = ?
fPrice = ?
```

Date: 10102020

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal:
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    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
\frac{\text{main():}}{\text{nDate} = ? 10102020}
\text{nOrders} = ?
\text{fPrice} = ?
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal:
int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
main():

nDate = ? 10102020

nOrders = ? 5

fPrice = ?
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal:
int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
main():

nDate = ? 10102020

nOrders = ? 5

fPrice = ?
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
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    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
main():
nDate = ? 10102020
nOrders = ? 5
fPrice = ?

computeTotal():
nOrders =
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
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   float fTotal:
    fTotal = nOrders * AMOUNT:
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    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
main():
nDate = ? 10102020
nOrders = ? 5
fPrice = ?

computeTotal():
nOrders = 5
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal:
int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
main():
nDate = ? 10102020
nOrders = ? 5
fPrice = ?

computeTotal():
nOrders = 5
fTotal = ?
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
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float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
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    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
main():
nDate = ? 10102020
nOrders = ? 5
fPrice = ?

computeTotal():
nOrders = 5
fTotal = ?
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
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int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
main():

nDate = ? 10102020

nOrders = ? 5

fPrice = ?

computeTotal():

nOrders = 5

fTotal = ? 495
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal:
int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
main():
nDate = ? 10102020
nOrders = ? 5
fPrice =

computeTotal():
nOrders = 5
fTotal = ? 495
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal:
int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
main():
nDate = ? 10102020
nOrders = ? 5
fPrice = ? 495

computeTotal():
nOrders = 5
fTotal = ? 495
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal:
int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
\frac{\text{main():}}{\text{nDate}} = ? 10102020

\text{nOrders} = ? 5

\text{fPrice} = ? 495
```

Date: 10102020 Orders: 5 Total price = 495.00

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal:
int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

```
main():

nDate = ? 10102020

nOrders = ? 5

fPrice = ? 495
```

Date: 10102020 Orders: 5 Total price = 495.00

#include<stdio.h>



```
#define AMOUNT 99.00
#define TAX 0.12
#define TTP1 0.15
#define TTP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
   float fTotal:
    fTotal = nOrders * AMOUNT:
    return fTotal:
int main ()
    int nDate:
    int nOrders:
    float fPrice;
    printf ("Date: ");
    scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
   return 0:
```

Screen output:

Date: 10102020 Orders: 5 Total price = 495.00

# Your turn to code

Write the function/s to compute for the gross amount and the tax.

$$total\_price = gross \times 1.12$$
  
 $tax = gross \times 0.12$ 

Note that the return statement can return one value only.

S. B. Chu (DLSU) User-defined functions October 15, 2020

12 | 35

# Compute gross amount and tax

```
float computeGross (float fTotal)
{
    return fTotal / (1 + TAX);
}
```

S. B. Chu (DLSU) User-defined functions October 15, 2020 13 | 35

# Compute gross amount and tax

```
float computeGross (float fTotal)
{
    return fTotal / (1 + TAX);
}

float computeTax (float fTotal)
{
    float fGross = computeGross (fTotal);
    return fTotal - fGross;
}
```

S. B. Chu (DLSU) **User-defined functions** October 15, 2020 13 | 35



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20

float computeTotal (int nOrders)
{
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal;
}
```

```
int main ()
{
    int nDate;
    int nOrders;
    float fPrice;

    printf ("Date: ");
    scanf ("%d", &nDate);

    printf ("Orders: ");
    scanf ("%d", &nOrders);

    fPrice = computeTotal (nOrders);
    printf ("Total price = %.2f\n", fPrice);
    return 0;
```



```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate;
#define TAX 0.12
                                                int nOrders;
#define TIP1 0.15
                                                float fPrice:
#define TIP2 0.18
#define TTP3 0.20
                                                printf ("Date: "):
                                                scanf ("%d", &nDate);
float computeTotal (int nOrders)
                                                printf ("Orders: "):
    float fTotal;
                                                scanf ("%d", &nOrders);
    fTotal = nOrders * AMOUNT;
                                                fPrice = computeTotal (nOrders):
    return fTotal;
                                                printf ("Total price = %.2f\n", fPrice);
                                                return 0;
float computeGross (float fTotal)
    return fTotal / (1 + TAX);
float computeTax (float fTotal)
    float fGross = computeGross (fTotal):
    return fTotal - fGross;
```

```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate:
#define TAX 0.12
                                                int nOrders:
#define TTP1 0.15
                                                float fPrice;
#define TIP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                printf ("Date: ");
float computeTotal (int nOrders)
                                                scanf ("%d", &nDate);
    float fTotal:
                                                printf ("Orders: "):
                                                scanf ("%d", &nOrders):
    fTotal = nOrders * AMOUNT:
    return fTotal:
                                                fPrice = computeTotal (nOrders):
                                                printf ("Total price = %.2f\n", fPrice);
float computeGross (float fTotal)
                                                fGross = computeGross (fPrice):
                                                printf ("Gross price = %.2f\n", fGross);
    return fTotal / (1 + TAX):
                                                return 0;
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
```



```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate:
#define TAX 0.12
                                                int nOrders:
#define TTP1 0.15
                                                float fPrice;
#define TIP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                float fTax:
float computeTotal (int nOrders)
                                                printf ("Date: "):
                                                scanf ("%d", &nDate):
    float fTotal:
                                                printf ("Orders: ");
    fTotal = nOrders * AMOUNT:
                                                scanf ("%d", &nOrders);
    return fTotal:
                                                fPrice = computeTotal (nOrders);
                                                printf ("Total price = %.2f\n", fPrice);
float computeGross (float fTotal)
                                                fGross = computeGross (fPrice);
    return fTotal / (1 + TAX):
                                                printf ("Gross price = %.2f\n", fGross);
                                                fTax = computeTax (fPrice);
float computeTax (float fTotal)
                                                printf ("Sales tax = %.2f\n", fTax):
    float fGross = computeGross (fTotal);
                                                return 0:
    return fTotal - fGross:
```



```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate:
#define TAX 0.12
                                                int nOrders:
#define TTP1 0.15
                                                float fPrice;
#define TIP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                float fTax:
float computeTotal (int nOrders)
                                                // printf ("Date: "):
                                                // scanf ("%d", &nDate):
    float fTotal:
                                                printf ("Orders: ");
    fTotal = nOrders * AMOUNT:
                                                scanf ("%d", &nOrders);
    return fTotal:
                                                fPrice = computeTotal (nOrders);
                                                printf ("Total price = %.2f\n", fPrice);
float computeGross (float fTotal)
                                                fGross = computeGross (fPrice);
    return fTotal / (1 + TAX):
                                                printf ("Gross price = %.2f\n", fGross);
                                                fTax = computeTax (fPrice);
float computeTax (float fTotal)
                                                printf ("Sales tax = %.2f\n", fTax):
    float fGross = computeGross (fTotal);
                                                return 0:
    return fTotal - fGross:
```



MvKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice 2 x 99.00

198.00

Total 2 item(s) Sales Tax

176.79 21.21

Grand Total

198.00

Tip Guide: 15%= 26.52

20%= 35.36

18%= 31.82 Thank you very much! See you again!

#### Tasks:

- 1. Ask for inputs
- 2. Compute
- 3. Display receipt
  - header
  - details
  - divider
  - tip guide
  - footer



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15 | 35

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0 198.00

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#### Tasks:

- 1. Ask for inputs
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Recall: returnType functionName (type1 param1, ...)



15 | 35

MyKitchen Taft Avenue, Manila Your Receipt

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Recall: returnType functionName (type1 param1, ...)



MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice 2 x 99.00

Total 2 item(s) 176.79
Sales Tax 21.21

198.00

Grand Total 198.00

Tip Guide:

> Thank you very much! See you again!

#### Tasks:

- 1. Ask for inputs
- 2. Compute
- Display receipt
  - header
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  - tip guide
  - footer

Recall: returnType functionName (type1 param1, ...)

displayDivider ()



MvKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice 2 x 99.00 198.00 Total 2 item(s) 176.79

21.21 Sales Tax Grand Total

198.00

15%= 26.52 18%= 31.82

20%= 35.36

Thank you very much! See you again!

#### Tasks:

Tip Guide:

- 1. Ask for inputs
- 2. Compute
- Display receipt
  - header
  - details
  - divider
  - tip guide
  - footer

Recall: returnType functionName (type1 param1, ...)

displayDivider ()



MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice 2 x 99.00 198.00

Tip Guide:

15%= 26.52 18%= 31.82 20%= 35.36

Thank you very much! See you again!

#### Tasks:

- 1. Ask for inputs
- 2. Compute
- 3. Display receipt
  - header
  - details
  - divider
  - tip guide
  - footer

Recall: returnType functionName (type1 param1, ...)

displayDivider ()



15 | 35

MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice 2 x 99.00 198.00

Tip Guide:

15%= 26.52 18%= 31.82 20%= 35.36

Thank you very much! See you again!

#### Tasks:

- 1. Ask for inputs
- 2. Compute
- Display receipt
  - header
  - details
  - divider
  - tip guide
  - footer
  - **100**

Recall: returnType functionName (type1 param1, ...)

void displayDivider ()



15 | 35

MvKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice 2 x 99.00

Total 2 item(s) 176.79 Sales Tax 21.21

Grand Total 198.00

Tip Guide: 15%= 26.52

18%= 31.82 20%= 35.36

198.00

Thank you very much! See you again!

#### Tasks:

- 1. Ask for inputs
- 2. Compute
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  - header
  - details
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  - tip guide
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Recall: returnType functionName (type1 param1, ...)

void displayDivider ()



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Fried Chix Rice 2 x 99.00 198.00

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> Thank you very much! See you again!

#### Tasks:

- Ask for inputs
- 2. Compute
- Display receipt
  - header
  - details
  - divider
  - tip guide
  - footer

Recall: returnType functionName (type1 param1, ...)

void displayDivider ()

No. of characters per line: 40



```
MyKitchen
Taft Avenue, Manila
Your Receipt

Date: 1/10/2021

Fried Chix Rice
2 x 99.00 198.00

Total 2 item(s) 176.79
Sales Tax 21.21

Grand Total 198.00
```

18%= 31.82

Thank you very much! See you again!

20%= 35.36

Recall: returnType functionName (type1 param1, ...)

### Tasks:

Tip Guide: 15%= 26.52

- 1. Ask for inputs
- 2. Compute
- Display receipt
  - header
  - details
  - divider
  - tip guide
  - footer

No. of characters per line: 40



```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate:
#define TAX 0.12
                                                int nOrders:
#define TTP1 0.15
                                                float fPrice;
#define TIP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                float fTax:
float computeTotal (int nOrders)
                                                // printf ("Date: "):
                                                // scanf ("%d", &nDate):
    float fTotal:
                                                printf ("Orders: ");
    fTotal = nOrders * AMOUNT:
                                                scanf ("%d", &nOrders);
    return fTotal:
                                                fPrice = computeTotal (nOrders);
                                                printf ("Total price = %.2f\n", fPrice);
float computeGross (float fTotal)
                                                fGross = computeGross (fPrice);
    return fTotal / (1 + TAX):
                                                printf ("Gross price = %.2f\n", fGross);
                                                fTax = computeTax (fPrice);
float computeTax (float fTotal)
                                                printf ("Sales tax = %.2f\n", fTax):
    float fGross = computeGross (fTotal);
                                                return 0:
    return fTotal - fGross:
```



```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate:
#define TAX 0.12
                                                int nOrders:
#define TTP1 0.15
                                                float fPrice;
#define TIP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                float fTax:
float computeTotal (int nOrders)
                                                // printf ("Date: "):
                                                // scanf ("%d", &nDate):
    float fTotal:
                                                printf ("Orders: ");
    fTotal = nOrders * AMOUNT:
                                                scanf ("%d", &nOrders);
    return fTotal:
                                                fPrice = computeTotal (nOrders);
                                                printf ("Total price = %.2f\n", fPrice);
float computeGross (float fTotal)
                                                fGross = computeGross (fPrice);
    return fTotal / (1 + TAX):
                                                printf ("Gross price = %.2f\n", fGross);
                                                fTax = computeTax (fPrice);
float computeTax (float fTotal)
                                                printf ("Sales tax = %.2f\n", fTax):
    float fGross = computeGross (fTotal);
                                                return 0:
    return fTotal - fGross:
void displayDivider ()
    printf ("%s%s%s\n", "-----", "-----",
```



```
#include<stdio.h>
                                           int main ()
#define AMOUNT 99.00
                                               int nDate:
#define TAX 0.12
                                               int nOrders:
#define TTP1 0.15
                                               float fPrice;
#define TTP2 0.18
                                               float fGross:
#define TIP3 0.20
                                               float fTax:
float computeTotal (int nOrders)
                                               // printf ("Date: "):
                                               // scanf ("%d", &nDate):
   float fTotal:
                                               printf ("Orders: "):
    fTotal = nOrders * AMOUNT:
                                               scanf ("%d", &nOrders):
   return fTotal:
                                               fPrice = computeTotal (nOrders):
                                               printf ("Total price = %.2f\n", fPrice);
float computeGross (float fTotal)
                                               fGross = computeGross (fPrice):
   return fTotal / (1 + TAX):
                                               printf ("Gross price = %.2f\n", fGross);
                                               fTax = computeTax (fPrice);
float computeTax (float fTotal)
                                               printf ("Sales tax = %.2f\n", fTax);
   float fGross = computeGross (fTotal);
                                               return 0:
   return fTotal - fGross;
void displayDivider ()
   printf ("%s%s%s\n", "-----"
```

## Let's trace



```
#include<stdio.h>
                                           int main ()
#define AMOUNT 99.00
                                                int nDate:
#define TAX 0.12
                                                int nOrders:
#define TTP1 0.15
                                               float fPrice;
#define TTP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                float fTax:
float computeTotal (int nOrders)
                                               // printf ("Date: "):
                                               // scanf ("%d", &nDate):
    float fTotal:
                                                printf ("Orders: "):
    fTotal = nOrders * AMOUNT:
                                                scanf ("%d", &nOrders):
    return fTotal:
                                                fPrice = computeTotal (nOrders):
                                               printf ("Total price = %.2f\n", fPrice);
float computeGross (float fTotal)
                                                fGross = computeGross (fPrice):
    return fTotal / (1 + TAX):
                                                printf ("Gross price = %.2f\n", fGross);
                                                fTax = computeTax (fPrice);
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                                                printf ("Sales tax = %.2f\n", fTax);
    float fGross = computeGross (fTotal);
                                                return 0:
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void displayDivider ()
    printf ("%s%s%s\n", "-----"
```

## Let's trace



```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate:
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                                                int nOrders:
#define TTP1 0.15
                                                float fPrice;
#define TTP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                float fTax:
float computeTotal (int nOrders)
                                                // printf ("Date: "):
                                                // scanf ("%d", &nDate):
   float fTotal:
                                                printf ("Orders: "):
    fTotal = nOrders * AMOUNT:
                                                scanf ("%d", &nOrders):
   return fTotal:
                                                fPrice = computeTotal (nOrders):
                                                printf ("Total price = %.2f\n", fPrice);
float computeGross (float fTotal)
                                                fGross = computeGross (fPrice):
   return fTotal / (1 + TAX):
                                                printf ("Gross price = %.2f\n", fGross);
                                                fTax = computeTax (fPrice);
float computeTax (float fTotal)
                                                printf ("Sales tax = %.2f\n", fTax);
   float fGross = computeGross (fTotal);
   return fTotal - fGross;
                                                displayDivider ();
                                                return 0;
void displayDivider ()
   printf ("%s%s%s\n", "-----", "----",
```

## Let's trace



```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate:
#define TAX 0.12
                                                int nOrders:
#define TTP1 0.15
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#define TTP2 0.18
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                                                // printf ("Date: "):
                                                // scanf ("%d", &nDate):
   float fTotal:
                                                printf ("Orders: "):
    fTotal = nOrders * AMOUNT:
                                                scanf ("%d", &nOrders):
   return fTotal:
                                                fPrice = computeTotal (nOrders):
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                                                fGross = computeGross (fPrice):
   return fTotal / (1 + TAX):
                                                printf ("Gross price = %.2f\n", fGross);
                                                fTax = computeTax (fPrice);
float computeTax (float fTotal)
                                                printf ("Sales tax = %.2f\n", fTax);
   float fGross = computeGross (fTotal);
   return fTotal - fGross;
                                                displayDivider ();
                                                return 0;
void displayDivider ()
   printf ("%s%s%s\n", "-----", "----",
```



MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice 2 x 99.00

Total 2 item(s) 176.79
Sales Tax 21.21

Sales Tax
-----Grand Total

198.00

Tip Guide: 15%= 26.52 18%= 31.82

20%= 35.36

198.00

Thank you very much! See you again!

#### Tasks:

- 1. Ask for inputs
- 2. Compute
- 3. Display receipt
  - header
  - details
  - divider
  - tip guide
  - footer



MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice 2 x 99.00

Total 2 item(s) 176.79

Sales Tax
-----Grand Total

21.21 -----198.00

Tip Guide: 15%= 26.52

20%= 35.36

? 18%= 31.82 2
Thank you very much!
See you again!

### Tasks:

- 1. Ask for inputs
- 2. Compute
- 3. Display receipt
  - header
  - detailsdivider
  - tip guide
    - footer



17 | 35

```
MyKitchen
          Taft Avenue, Manila
              Your Receipt
Date: 1/10/2021
Fried Chix Rice
    2 x 99.00
Total 2 item(s)
                                  176.79
Sales Tax
                                  21.21
Grand Total
                                  198.00
Tip Guide:
15%= 26.52
               18%= 31.82
                             20%= 35.36
          Thank you very much!
             See you again!
```

Recall: What is the screen output of

```
printf ("%10s", "hello");
```

- 1. Ask for inputs
- 2. Compute
- 3. Display receipt
  - header
  - details
  - divider
  - tip guide
    - footer



17 | 35

```
MyKitchen
          Taft Avenue, Manila
              Your Receipt
Date: 1/10/2021
Fried Chix Rice
    2 x 99.00
                                  198.00
Total 2 item(s)
                                  176.79
Sales Tax
                                  21.21
Grand Total
                                  198.00
Tip Guide:
15%= 26.52
               18%= 31.82
                             20%= 35.36
```

Thank you very much! See you again! Recall: What is the screen output of

printf ("%10s", "hello");

\_\_\_\_hello

## Tasks:

- Ask for inputs
- 2. Compute
- Display receipt
  - header
  - details
  - divider
  - tip guide
    - footer



MyKitchen Taft Avenue, Manila Your Receipt

Date: 1/10/2021

Fried Chix Rice 2 x 99.00

Total 2 item(s) 176.79 Sales Tax 21.21 Grand Total

Tip Guide: 15%= 26.52 18%= 31.82 20%= 35.36

> Thank you very much! See you again!

### Tasks:

- Ask for inputs
- 2. Compute
- Display receipt
  - header
  - details
  - divider
  - tip quide
    - footer

Recall: What is the screen output of

printf ("%10s", "hello");

\_\_\_\_hello

198.00

198.00

Note that each line has 40 characters (or spaces).



17 | 35

```
MyKitchen
           Taft Avenue, Manila
               Your Receipt
 Date: 1/10/2021
 Fried Chix Rice
     2 x 99.00
                                   198.00
 Total 2 item(s)
                                   176.79
 Sales Tax
                                    21.21
 Grand Total
                                   198.00
 Tip Guide:
 15%= 26.52
                18%= 31.82
                              20%= 35.36
           Thank you very much!
              See you again!
Tasks:
```

Recall: What is the screen output of

```
printf ("%10s", "hello");
____hello
```

Note that each line has 40 characters (or spaces).

```
void displayHeader ()
{
```

- Ask for inputs
- 2. Compute
- Display receipt
  - header
  - details divider

  - tip quide
    - footer



Recall: What is the screen output of

```
printf ("%10s", "hello");
____hello
```

Note that each line has 40 characters (or spaces).

```
void displayHeader ()
{
    printf ("%s\n", "MyKitchen");
    printf ("%s\n", "Taft Avenue, Manila");
    printf ("%s\n", "Your Receipt");
}
```

#### Tasks:

- 1. Ask for inputs
- 2. Compute
- Display receipt
  - header
  - details
  - divider
  - tip guide
    - footer



#### Tasks:

- Ask for inputs
- 2. Compute
- 3. Display receipt
  - header
  - details
  - divider
  - tip quide
    - footer

```
Recall: What is the screen output of
```

```
printf ("%10s", "hello");
____hello
```

Note that each line has 40 characters (or spaces).

```
void displayHeader ()
     printf ("%s\n", "MyKitchen");
printf ("%s\n", "Taft Avenue, Manila");
     printf ("%s\n", "Your Receipt");
```

1234567890123456789012345678901234567890



#### Tasks:

- Ask for inputs
- 2. Compute
- 3. Display receipt
  - header
  - details
  - divider
  - tip quide
    - footer

```
Recall: What is the screen output of
```

```
printf ("%10s", "hello");
____hello
Note that each line has 40 characters (or spaces).
```

```
void displayHeader ()
```

```
printf ("%s\n", "MyKitchen");
printf ("%s\n", "Taft Avenue, Manila");
printf ("%s\n", "Your Receipt");
```

1234567890123456789012345678901234567890



- Ask for inputs
- 2. Compute
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  - header
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```
Recall: What is the screen output of
```

```
printf ("%10s", "hello");
____hello
Note that each line has 40 characters (or spaces).
```

```
void displayHeader ()
     printf ("%s\n", "MyKitchen");
printf ("%s\n", "Taft Avenue, Manila");
     printf ("%s\n", "Your Receipt");
```

17 | 35

1234567890123456789012345678901234567890



- Ask for inputs
- 2. Compute
- Display receipt
  - header
  - details
  - divider
  - tip quide
    - footer

Recall: What is the screen output of

```
printf ("%10s", "hello");
____hello
```

Note that each line has 40 characters (or spaces).

```
void displayHeader ()
     printf ("%s\n", "MyKitchen");
printf ("%s\n", "Taft Avenue, Manila");
     printf ("%s\n", "Your Receipt");
```

## 1234567890123456789012345678901234567890 MyKitchen

- half of 40 is 20
- MyKitchen has 9 characters
- 9/2 = 4;  $5^{th}$  character should be at  $20^{th}$  space



#### Tasks:

- Ask for inputs
- 2. Compute
- 3. Display receipt
  - header
  - details
  - divider
  - tip guide
    - footer

Recall: What is the screen output of

```
printf ("%10s", "hello");
```

```
____hello
```

Note that each line has 40 characters (or spaces).

```
void displayHeader ()
{
    printf ("%s\n", "MyKitchen");
    printf ("%s\n", "Taft Avenue, Manila");
    printf ("%s\n", "Your Receipt");
}
```

## 123456789012345678901234567890 MyKitchen

- half of 40 is 20
- MyKitchen has 9 characters
- 9/2 = 4;  $5^{th}$  character should be at  $20^{th}$  space
  - last character of MyKitchen is at  $24^{th}$  space



#### Tasks:

- Ask for inputs
- 2. Compute
- 3. Display receipt
  - header
  - details
  - divider
  - tip guide
    - footer

```
Recall: What is the screen output of
```

```
printf ("%10s", "hello");
```

```
____hello
```

Note that each line has 40 characters (or spaces).

```
void displayHeader ()
   printf ("%24s\n", "MyKitchen");
    printf ("%s\n", "Taft Avenue, Manila");
   printf ("%s\n", "Your Receipt");
```

## 1234567890123456789012345678901234567890 MyKitchen

- half of 40 is 20
- MyKitchen has 9 characters
- 9/2 = 4:  $5^{th}$  character should be at  $20^{th}$  space
  - last character of MyKitchen is at  $24^{th}$  space

# **HW: Your tasks**

Write the function/s to

- display details
- display footer

Complete main() to generate the receipt

# Your turn to code

Write the function/s to compute for tip amounts.

$$tip_1 = gross * 0.15$$

$$tip_2 = gross * 0.18$$

$$tip_3 = gross * 0.20$$

Note that the **return** statement can return one value only. You may however make **3 functions** to compute for each of the tip amounts.

You may also create **one function** that will compute and update the 3 tip amounts.

```
void computeTips (float fGross, float* tip1, float* tip2, float* tip3)
{
```

You may also create **one function** that will compute and update the 3 tip amounts.

```
void computeTips (float fGross, float* tip1, float* tip2, float* tip3)
{
```

You may also create **one function** that will compute and update the 3 tip amounts.

```
void computeTips (float fGross, float* tip1, float* tip2, float* tip3)
{
}
```

The data type of tip1 is float\*.

You may also create **one function** that will compute and update the 3 tip amounts.

```
void computeTips (float fGross, float* tip1, float* tip2, float* tip3)
{
}
```

The data type of tip1 is float\*.

• tip1 is a pointer variable.

You may also create **one function** that will compute and update the 3 tip amounts.

```
void computeTips (float fGross, float* tip1, float* tip2, float* tip3)
{
}
```

The data type of tip1 is float\*.

• tip1 is a *pointer variable*.

## Pointer variable

- pointer in short
- holds a *memory address*, where the value is stored.

You may also create **one function** that will compute and update the 3 tip amounts.

```
void computeTips (float fGross, float* tip1, float* tip2, float* tip3)
{
}
```

The data type of tip1 is float\*.

• tip1 is a pointer variable.

## Pointer variable

- pointer in short
- holds a *memory address*, where the value is stored.
- The data type of tip is float\*, pointer to a float.

```
float fVal;
fVal = 15;
8000003
                     fVal
             15.0
8000004
8000005
900001A
900001B
900001C
```

```
float fVal;
fVal = 15;
8000003
             15.0
                      fVal
 8000004
                      > value of fVal
 8000005
900001A
900001B
900001C
```

```
float fVal;
                                      float* pVal
fVal = 15;
                                      *pVal = 15;
8000003
             15.0
                      fVal
                                       8000003
                                                  900001A
                                                            pVal
8000004

→ value of fVal

                                       8000004
8000005
                                       8000005
900001A
                                       900001A
                                                    15.0
900001B
                                       900001B
900001C
                                       900001C
```

DO NOT declare pointer variables for now. You MAY use pointers as parameters.

```
float fVal;
                                      float* pVal
fVal = 15;
                                      *pVal = 15;
8000003
             15.0
                      fVal
                                       8000003
                                                 900001A
                                                            pVal
8000004
                      * value of fVal
                                                            where the value
                                       8000004
                                                              is stored
8000005
                                       8000005
900001A
                                       900001A
                                                    15.0
900001B
                                       900001B
900001C
                                       900001C
```

DO NOT declare pointer variables for now. You MAY use pointers as parameters.

```
float fVal;
                                      float* pVal
fVal = 15;
                                       *pVal = 15;
             15.0
 8000003
                      fVal
                                       8000003
                                                  900001A
                                                             pVal
 8000004
                      * value of fVal
                                                             where the value
                                       8000004
                                                              is stored
 8000005
                                       8000005
900001A
                                       900001A
                                                    15.0
900001B
                                       900001B
                                                             > the value
900001C
                                       900001C
```

DO NOT declare pointer variables for now. You MAY use pointers as parameters.

```
float* pVal
    :
*pVal = 15;
```

```
float* pVal
*pVal = 15;
  float* pVal
```

```
float* pVal
*pVal = 15;
  float* pVal
 data type
```

```
float* pVal
*pVal = 15;
  float* pVal
 data type
           identifier
```

```
float* pVal
*pVal = 15;
  float* pVal
 data type
            identifier

    holds memory address
```

```
float* pVal
*pVal = 15;
  float* pVal
 data type
           identifier
           holds memory address
```

```
float *pVal
    :
*pVal = 15;
```

```
float* pVal
    :
*pVal = 15;

float* pVal
    data type
    identifier
```

holds memory address

```
float *pVal
*pVal = 15;
  float *pVal
```

## **Pointers**

```
float* pVal

:

*pVal = 15;
```

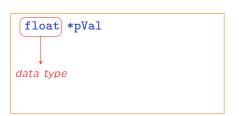
```
float* pVal

data type

• identifier

• holds memory address
```

```
float *pVal
    :
*pVal = 15;
```



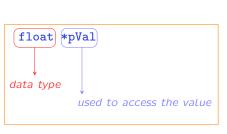
22 | 35

## **Pointers**

```
float* pVal
*pVal = 15;
```

```
float* pVal
data type
          identifier
          holds memory address
```

```
float *pVal
*pVal = 15;
```



## **Pointers**

```
float* pVal

:
*pVal = 15;

*pV

float* pVal

data type

identifier
```

holds memory address

```
float *pVal
*pVal = 15;
  float *pVal
data type
            used to access the value
```

The \* may either be close to the data type (at its left), or close to the identifier (at its right).

```
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
void computeTips (float fGross, float* tip1, float* tip2, float* tip3)
```

```
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20

void computeTips (float fGross, float * tip1 , float* tip2, float* tip3)
{
    *tip1 = fGross * TIP1;
}
```

```
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20

void computeTips (float fGross, float* tip1, float * tip2, float* tip3)
{
    *tip1 = fGross * TIP1;
    *tip2 = fGross * TIP2;
}
```

```
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20

void computeTips (float fGross, float* tip1, float* tip2, float * tip3)
{
    *tip1 = fGross * TIP1;
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3;
}
```

```
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20

void computeTips (float fGross, float* tip1, float* tip2, float* tip3)
{
   *tip1 = fGross * TIP1;
   *tip2 = fGross * TIP2;
   *tip3 = fGross * TIP3;
}
```

```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate;
#define TAX 0.12
                                                int nOrders;
#define TIP1 0.15
                                                float fPrice:
#define TIP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                float fTax;
float computeTotal (int nOrders)
                                                // printf ("Date: ");
                                                // scanf ("%d", &nDate);
   float fTotal;
   fTotal = nOrders * AMOUNT;
                                                printf ("Orders: ");
    return fTotal:
                                                scanf ("%d", &nOrders):
                                                fPrice = computeTotal (nOrders);
float computeGross (float fTotal)
                                                printf ("Total price = %.2f\n", fPrice);
                                                fGross = computeGross (fPrice):
   return fTotal / (1 + TAX):
                                                printf ("Gross price = %.2f\n", fGross);
                                                fTax = computeTax (fPrice):
float computeTax (float fTotal)
                                                printf ("Sales tax = %.2f\n", fTax);
   float fGross = computeGross (fTotal);
                                                return 0:
    return fTotal - fGross;
```



```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate;
#define TAX 0.12
                                                int nOrders;
#define TIP1 0.15
                                                float fPrice:
#define TIP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                float fTax;
float computeTotal (int nOrders)
                                                // printf ("Date: ");
                                                // scanf ("%d", &nDate);
   float fTotal;
   fTotal = nOrders * AMOUNT;
                                                printf ("Orders: ");
   return fTotal:
                                                scanf ("%d", &nOrders);
                                                fPrice = computeTotal (nOrders);
float computeGross (float fTotal)
                                                printf ("Total price = %.2f\n", fPrice);
   return fTotal / (1 + TAX):
                                                fGross = computeGross (fPrice):
                                                printf ("Gross price = %.2f\n", fGross);
                                                fTax = computeTax (fPrice):
float computeTax (float fTotal)
                                                printf ("Sales tax = %.2f\n", fTax);
   float fGross = computeGross (fTotal);
                                                return 0:
    return fTotal - fGross:
void computeTips (float fGross.
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3;
```



```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate;
#define TAX 0.12
                                                int nOrders;
#define TIP1 0.15
                                                float fPrice;
#define TIP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                float fTax;
                                                float fTip1, fTip2, fTip3;
float computeTotal (int nOrders)
                                                // printf ("Date: ");
   float fTotal;
                                                // scanf ("%d", &nDate):
   fTotal = nOrders * AMOUNT;
    return fTotal:
                                                printf ("Orders: "):
                                                scanf ("%d", &nOrders):
float computeGross (float fTotal)
                                                fPrice = computeTotal (nOrders);
                                                printf ("Total price = %.2f\n", fPrice);
   return fTotal / (1 + TAX):
                                                fGross = computeGross (fPrice);
                                                printf ("Gross price = %.2f\n", fGross);
float computeTax (float fTotal)
                                                fTax = computeTax (fPrice);
                                                printf ("Sales tax = %.2f\n", fTax);
   float fGross = computeGross (fTotal);
    return fTotal - fGross:
                                                return 0;
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3;
```



```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate;
#define TAX 0.12
                                                int nOrders;
#define TIP1 0.15
                                                float fPrice;
#define TIP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                float fTax;
                                                float fTip1, fTip2, fTip3;
float computeTotal (int nOrders)
                                                // printf ("Date: ");
   float fTotal;
                                                // scanf ("%d", &nDate):
   fTotal = nOrders * AMOUNT;
   return fTotal:
                                                printf ("Orders: "):
                                                scanf ("%d", &nOrders):
float computeGross (float fTotal)
                                                fPrice = computeTotal (nOrders);
                                                printf ("Total price = %.2f\n", fPrice);
   return fTotal / (1 + TAX):
                                                fGross = computeGross (fPrice);
                                                printf ("Gross price = %.2f\n", fGross);
float computeTax (float fTotal)
                                                fTax = computeTax (fPrice);
                                                printf ("Sales tax = %.2f\n", fTax);
   float fGross = computeGross (fTotal);
    return fTotal - fGross:
                                                computeTips ( );
                                                return 0:
void computeTips (float fGross.
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3;
```



```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate;
#define TAX 0.12
                                                int nOrders;
#define TIP1 0.15
                                                float fPrice:
#define TIP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                float fTax;
                                                float fTip1, fTip2, fTip3;
float computeTotal (int nOrders)
                                                // printf ("Date: ");
   float fTotal;
                                                // scanf ("%d", &nDate):
   fTotal = nOrders * AMOUNT;
   return fTotal:
                                                printf ("Orders: "):
                                                scanf ("%d", &nOrders):
float computeGross (float fTotal)
                                                fPrice = computeTotal (nOrders);
                                                printf ("Total price = %.2f\n", fPrice);
   return fTotal / (1 + TAX):
                                                fGross = computeGross (fPrice);
                                                printf ("Gross price = %.2f\n", fGross);
float computeTax (float fTotal)
                                                fTax = computeTax (fPrice);
                                                printf ("Sales tax = %.2f\n", fTax);
   float fGross = computeGross (fTotal);
    return fTotal - fGross:
                                                computeTips (fGross, );
                                                return 0:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3;
```



```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate;
#define TAX 0.12
                                                int nOrders;
#define TIP1 0.15
                                                float fPrice;
#define TIP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                float fTax;
                                                float fTip1, fTip2, fTip3;
float computeTotal (int nOrders)
                                                // printf ("Date: ");
   float fTotal;
                                                // scanf ("%d", &nDate):
   fTotal = nOrders * AMOUNT;
   return fTotal:
                                                printf ("Orders: "):
                                                scanf ("%d", &nOrders):
float computeGross (float fTotal)
                                                fPrice = computeTotal (nOrders);
                                                printf ("Total price = %.2f\n", fPrice);
   return fTotal / (1 + TAX):
                                                fGross = computeGross (fPrice):
                                                printf ("Gross price = %.2f\n", fGross);
float computeTax (float fTotal)
                                                fTax = computeTax (fPrice);
                                                printf ("Sales tax = %.2f\n", fTax);
   float fGross = computeGross (fTotal);
    return fTotal - fGross:
                                                computeTips (fGross, &fTip1, );
                                                return 0:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3;
```



```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate;
#define TAX 0.12
                                                int nOrders;
#define TIP1 0.15
                                                float fPrice;
#define TIP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                float fTax;
                                                float fTip1, fTip2, fTip3;
float computeTotal (int nOrders)
                                                // printf ("Date: ");
   float fTotal;
                                                // scanf ("%d", &nDate):
   fTotal = nOrders * AMOUNT;
   return fTotal:
                                                printf ("Orders: "):
                                                scanf ("%d", &nOrders):
float computeGross (float fTotal)
                                                fPrice = computeTotal (nOrders);
                                                printf ("Total price = %.2f\n", fPrice);
   return fTotal / (1 + TAX):
                                                fGross = computeGross (fPrice):
                                                printf ("Gross price = %.2f\n", fGross);
float computeTax (float fTotal)
                                                fTax = computeTax (fPrice);
                                                printf ("Sales tax = %.2f\n", fTax);
   float fGross = computeGross (fTotal);
    return fTotal - fGross:
                                                computeTips (fGross, &fTip1, &fTip2,
                                                            &fTip3);
void computeTips (float fGross,
                                                return 0:
                float* tip1, float* tip2, }
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3;
```



```
#include<stdio.h>
                                            int main ()
#define AMOUNT 99.00
                                                int nDate;
#define TAX 0.12
                                                int nOrders;
#define TIP1 0.15
                                                float fPrice:
#define TIP2 0.18
                                                float fGross:
#define TIP3 0.20
                                                float fTax;
                                                float fTip1, fTip2, fTip3;
float computeTotal (int nOrders)
                                                // printf ("Date: ");
   float fTotal;
                                                // scanf ("%d", &nDate):
   fTotal = nOrders * AMOUNT;
    return fTotal:
                                                printf ("Orders: "):
                                                scanf ("%d", &nOrders):
float computeGross (float fTotal)
                                                fPrice = computeTotal (nOrders);
                                                printf ("Total price = %.2f\n", fPrice);
   return fTotal / (1 + TAX):
                                                fGross = computeGross (fPrice):
                                                printf ("Gross price = %.2f\n", fGross);
float computeTax (float fTotal)
                                                fTax = computeTax (fPrice);
                                                printf ("Sales tax = %.2f\n", fTax);
   float fGross = computeGross (fTotal);
    return fTotal - fGross:
                                                computeTips (fGross, &fTip1, &fTip2,
                                                            &fTip3):
                                                printf ("Tips: %.2f, %.2f, %.2f\n",
void computeTips (float fGross,
                                                        fTip1, fTip2, fTip3);
                float* tip1, float* tip2,
                float* tip3)
                                                return 0;
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3;
```



```
int main ()
    int nDate;
    int nOrders;
   float fPrice:
   float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate);
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
   printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```



```
int main ()
    int nDate;
                                                  8881
    int nOrders;
                                                  8882
    float fPrice:
    float fGross:
                                                  8883
   float fTax;
                                                                        9020
    float fTip1, fTip2, fTip3;
                                                  8884
                                                                        9021
                                                  8885
    // printf ("Date: ");
                                                                        9022
    // scanf ("%d", &nDate);
                                                  8886
                                                                        9023
    printf ("Orders: ");
                                                  8887
    scanf ("%d", &nOrders):
                                                                        9024
                                                  8888
    fPrice = computeTotal (nOrders);
                                                  8889
   printf ("Total price = %.2f\n", fPrice);
    fGross = computeGross (fPrice);
    printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```



```
int main ()
    int nDate;
                                                  8881
                                                           ?
                                                                 nDate
    int nOrders;
                                                  8882
    float fPrice:
    float fGross:
                                                  8883
   float fTax;
                                                                        9020
    float fTip1, fTip2, fTip3;
                                                  8884
                                                                        9021
                                                  8885
    // printf ("Date: ");
                                                                        9022
    // scanf ("%d", &nDate);
                                                  8886
                                                                        9023
    printf ("Orders: ");
                                                  8887
    scanf ("%d", &nOrders):
                                                                        9024
                                                  8888
    fPrice = computeTotal (nOrders);
                                                  8889
   printf ("Total price = %.2f\n", fPrice);
    fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
```

return 0;

fTip1, fTip2, fTip3);



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
    fGross = computeGross (fPrice);
    printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
8881
          ?
                 nDate
8882
          ?
                 nOrders
8883
                         9020
8884
                         9021
8885
                         9022
8886
                         9023
8887
                         9024
8888
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
    fGross = computeGross (fPrice);
    printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
8881
          ?
                 nDate
8882
          ?
                 nOrders
8883
          ?
                 fPrice
                          9020
8884
                          9021
8885
                          9022
8886
                          9023
8887
                          9024
8888
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
    fGross = computeGross (fPrice);
    printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
8881
          ?
                 nDate
8882
          ?
                 nOrders
8883
          ?
                 fPrice
                          9020
8884
          7
                 fGross.
                          9021
8885
                          9022
8886
                          9023
8887
                          9024
8888
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
    fGross = computeGross (fPrice);
    printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
8881
          ?
                 nDate
8882
          ?
                 nOrders
8883
          ?
                 fPrice
                          9020
8884
          7
                 fGross.
                          9021
8885
          7
                 fTax
                          9022
8886
                          9023
8887
                          9024
8888
8889
```



```
int main ()
    int nDate;
                                                   8881
                                                             ?
                                                                   nDate
    int nOrders;
                                                   8882
                                                             ?
                                                                   nOrders
    float fPrice:
    float fGross:
                                                   8883
                                                             ?
                                                                   fPrice
    float fTax;
                                                                          9020
    float fTip1, fTip2, fTip3;
                                                   8884
                                                             7
                                                                   fGross.
                                                                          9021
                                                   8885
                                                             7
                                                                   fTax
    // printf ("Date: ");
                                                                          9022
    // scanf ("%d", &nDate):
                                                   8886
                                                             7
                                                                   fTip1
                                                                          9023
    printf ("Orders: ");
                                                   8887
                                                             7
                                                                   fTip2
    scanf ("%d", &nOrders):
                                                                          9024
                                                   8888
                                                             ?
                                                                   fTip3
    fPrice = computeTotal (nOrders);
                                                   8889
    printf ("Total price = %.2f\n", fPrice);
    fGross = computeGross (fPrice);
    printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
```

return 0;



```
int main ()
    int nDate;
    int nOrders;
   float fPrice:
   float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
   // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                  nDate
8882
                  nOrders
8883
           ?
                  fPrice
                           9020
8884
           7
                  fGross.
                           9021
8885
          7
                  fTax
                           9022
8886
           7
                  fTip1
                           9023
8887
           7
                  fTip2
                           9024
8888
           7
                  fTip3
8889
```





```
int main ()
    int nDate;
    int nOrders;
   float fPrice:
   float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
   // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                  nDate
8882
                  nOrders
8883
           ?
                  fPrice
                           9020
8884
           7
                  fGross.
                           9021
8885
          7
                  fTax
                           9022
8886
           7
                  fTip1
                           9023
8887
           7
                  fTip2
                           9024
8888
           7
                  fTip3
8889
```

```
Orders: _
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
   float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                 nDate
8882
          10
                 nOrders
8883
          ?
                 fPrice
                          9020
8884
          7
                 fGross.
                          9021
8885
          7
                 fTax
                          9022
8886
          7
                 fTip1
                          9023
8887
          7
                 fTip2
                          9024
8888
          7
                 fTip3
8889
```

```
Orders: 10
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
   float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders):
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                 nDate
8882
          10
                 nOrders
8883
          ?
                 fPrice
                          9020
8884
          7
                 fGross.
                          9021
8885
          7
                 fTax
                          9022
8886
          7
                 fTip1
                          9023
8887
          7
                 fTip2
                          9024
8888
          7
                 fTip3
8889
```

```
Orders: 10
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders
                                 computeTotal ():
8883
          ?
                 fPrice.
                          9020
                                    10
                                            nOrders
          7
8884
                 fGross.
                          9021
8885
          7
                 fTax
                          9022
8886
          7
                 fTip1
                          9023
8887
          7
                 fTip2
                          9024
8888
          7
                 fTip3
8889
```

```
Orders: 10
```

nOrders

fTotal

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders
                                  computeTotal ():
8883
          ?
                 fPrice.
                          9020
                                    10
          7
8884
                 fGross.
                          9021
                                     ?
8885
          7
                 fTax
                          9022
8886
          7
                 fTip1
                          9023
8887
          7
                 fTip2
                          9024
8888
          7
                 fTip3
8889
```

```
Orders: 10
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders
8883
          ?
                 fPrice.
                          9020
          7
8884
                 fGross.
                          9021
8885
          7
                 fTax
                           9022
8886
          7
                 fTip1
                           9023
8887
          7
                 fTip2
                          9024
8888
          7
                 fTip3
8889
```

```
computeTotal ():
9020 10 nOrders
9021 990.0 FTotal
9022
9023
9024
```

nOrders

fTotal

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders
                                 computeTotal ():
8883
          ?
                 fPrice.
                          9020
                                    10
          7
8884
                 fGross.
                          9021
                                   990.0
8885
          7
                 fTax
                          9022
8886
          7
                 fTip1
                          9023
8887
          7
                 fTip2
                          9024
8888
          7
                 fTip3
8889
```

```
Orders: 10
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
   float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders):
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders
8883
        990.0
                 fPrice
                          9020
8884
                 fGross.
                          9021
8885
          7
                 fTax
                          9022
8886
          7
                 fTip1
                          9023
8887
          7
                 fTip2
                          9024
8888
          7
                 fTip3
8889
```

```
Orders: 10
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders
8883
        990.0
                 fPrice
                          9020
8884
                 fGross.
                          9021
8885
          7
                 fTax
                          9022
8886
          7
                 fTip1
                          9023
8887
          7
                 fTip2
                          9024
8888
          7
                 fTip3
8889
```

```
Orders: 10
Total price = 990.00
-
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
    fGross = computeGross (fPrice):
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders
8883
        990.0
                 fPrice
                          9020
8884
                 fGross.
                          9021
8885
          7
                 fTax
                          9022
8886
          7
                 fTip1
                          9023
8887
          7
                 fTip2
                          9024
8888
          7
                 fTip3
8889
```

```
Orders: 10
Total price = 990.00
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders
                                 computeGross ():
8883
        990.0
                 fPrice
                          9020
                                  990 0
8884
                 fGross.
                          9021
8885
          7
                 fTax
                          9022
8886
          7
                 fTip1
                          9023
8887
          7
                 fTip2
                          9024
8888
          7
                 fTip3
8889
```

```
Orders: 10
Total price = 990.00
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders
8883
        990.0
                 fPrice
8884
                 fGross.
8885
          7
                 fTax
8886
          7
                 fTip1
8887
          7
                 fTip2
8888
          7
                 fTip3
8889
```

```
computeGross ():
9020 990.0 FTotal
9021
9022
9023
9024
```

```
Orders: 10
Total price = 990.00
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
    fGross = computeGross (fPrice):
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders
8883
        990.0
                 fPrice
                          9020
8884
        883.93
                 fGross.
                          9021
8885
          7
                 fTax
                          9022
8886
          7
                 fTip1
                          9023
8887
          7
                 fTip2
                          9024
8888
          7
                 fTip3
8889
```

```
Orders: 10
Total price = 990.00
-
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
                          9020
8884
        883.93
                 fGross.
                          9021
8885
          7
                 fTax
                          9022
8886
          7
                 fTip1
                          9023
8887
          7
                 fTip2
                          9024
8888
          7
                 fTip3
8889
```

```
Orders: 10
Total price = 990.00
Gross price = 883.93
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
                          9020
8884
        883.93
                 fGross.
                          9021
8885
          7
                 fTax
                          9022
8886
          7
                 fTip1
                          9023
8887
          7
                 fTip2
                          9024
8888
          7
                 fTip3
8889
```

```
Orders: 10
Total price = 990.00
Gross price = 883.93
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

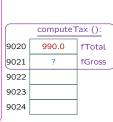
```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders
                                 computeTax ():
8883
        990.0
                 fPrice
                          9020
                                  990 0
                                            fTotal.
8884
                 fGross.
                          9021
8885
          7
                 fTax
                          9022
8886
          7
                 fTip1
                          9023
8887
          7
                 fTip2
                          9024
8888
          7
                 fTip3
8889
```

```
Orders: 10
Total price = 990.00
Gross price = 883.93
-
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
8884
                 fGross.
8885
          7
                 fTax
8886
          7
                 fTip1
8887
          7
                 fTip2
8888
          7
                 fTip3
8889
```



```
Orders: 10
Total price = 990.00
Gross price = 883.93
-
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TTP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
          10
                 nOrders.
8883
        990.0
                 fPrice
8884
                 fGross.
8885
          7
                 fTax
8886
          7
                 fTip1
8887
          7
                 fTip2
8888
          7
                 fTip3
8889
```

```
computeTax ():
9020 990.0 FTotal
9021 ? fGross
9022
9023 computeGross ():
9024 990.0 FTotal
```

```
Orders: 10
Total price = 990.00
Gross price = 883.93
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TTP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
          10
                 nOrders.
8883
        990.0
                 fPrice
8884
                 fGross.
8885
          7
                 fTax
8886
          7
                 fTip1
8887
          7
                 fTip2
8888
          7
                 fTip3
8889
```

```
computeTax ():
9020 990.0 fTotal
9021 7 fGross
9022
9023 computeGross ():
9024 990.0 fTotal
```

```
Orders: 10
Total price = 990.00
Gross price = 883.93
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
8884
                 fGross.
8885
          7
                 fTax
8886
          7
                 fTip1
8887
          7
                 fTip2
8888
          7
                 fTip3
8889
```

```
computeTax ():
9020 990.0 fTotal
9021 883.93 fGross
9022
9023
9024
```

```
Orders: 10
Total price = 990.00
Gross price = 883.93
```



```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
8884
                 fGross.
8885
          7
                 fTax
8886
          7
                 fTip1
8887
          7
                 fTip2
8888
          7
                 fTip3
8889
```

```
computeTax ():
9020 990.0 FTotal
9021 883.93 FGross
9022
9023
9024
```

```
Orders: 10
Total price = 990.00
Gross price = 883.93
-
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
                          9020
8884
        883.93
                 fGross.
                          9021
8885
        106.07
                 fTax
                          9022
8886
                 fTip1
                          9023
8887
          7
                 fTip2
                          9024
8888
          ?
                 fTip3
```

```
Orders: 10
Total price = 990.00
Gross price = 883.93
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
                          9020
8884
       883.93
                 fGross.
                          9021
8885
       106.07
                 fTax
                          9022
8886
                 fTip1
                          9023
8887
                 fTip2
                          9024
8888
          ?
                 fTip3
```

```
Orders: 10
Total price = 990.00
Gross price = 883.93
Sales tax = 106.07
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross:
   float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
                          9020
8884
        883.93
                 fGross.
                          9021
8885
        106.07
                 fTax
                          9022
8886
                 fTip1
                          9023
8887
                 fTip2
                          9024
8888
          ?
                 fTip3
```

```
Orders: 10
Total price = 990.00
Gross price = 883.93
Sales tax = 106.07
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
8884
        883.93
                 fGross.
8885
        106.07
                 fTax
8886
                 fTip1
8887
          7
                 fTip2
8888
          7
                 fTip3
```



```
Orders: 10
Total price = 990.00
Gross price = 883.93
Sales tax = 106.07
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
8884
       883.93
                 fGross.
8885
       106.07
                 fTax
8886
       132.59
                 fTip1
8887
                 fTip2
8888
          7
                 fTip3
```

```
computeTips ():
9020 883.93 fGross
9021 8886 tip1
9022 8887 tip2
9023 8888 tip3
9024
```

```
Orders: 10
Total price = 990.00
Gross price = 883.93
Sales tax = 106.07
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal;
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
8884
       883.93
                 fGross.
8885
       106.07
                 fTax
8886
       132 59
                 fTip1
8887
       159.11
                 fTip2
8888
          ?
                 fTip3
```

```
computeTips ():
9020 883.93 fGross
9021 8886 tip1
9022 8887 tip2
9023 8888 tip3
9024
```

```
Orders: 10
Total price = 990.00
Gross price = 883.93
Sales tax = 106.07
```

```
#include<stdio.h>
#define AMOUNT 99.00
#define TAX 0.12
#define TIP1 0.15
#define TIP2 0.18
#define TIP3 0.20
float computeTotal (int nOrders)
    float fTotal;
    fTotal = nOrders * AMOUNT;
    return fTotal:
float computeGross (float fTotal)
    return fTotal / (1 + TAX):
float computeTax (float fTotal)
    float fGross = computeGross (fTotal);
    return fTotal - fGross:
void computeTips (float fGross,
                float* tip1, float* tip2,
                float* tip3)
    *tip1 = fGross * TIP1:
    *tip2 = fGross * TIP2;
    *tip3 = fGross * TIP3:
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
8884
       883.93
                 fGross.
8885
       106.07
                 fTax
8886
       132 59
                 fTip1
8887
       159.11
                 fTip2
8888
       179.79
                 fTip3
```



```
Orders: 10
Total price = 990.00
Gross price = 883.93
Sales tax = 106.07
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross:
    float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
    printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
                          9020
8884
        883.93
                 fGross.
                          9021
8885
        106.07
                 fTax
                          9022
8886
        132 59
                 fTip1
                          9023
8887
        159.11
                 fTip2
                          9024
8888
        179.79
                 fTip3
8889
```

```
Orders: 10
Total price = 990.00
Gross price = 883.93
Sales tax = 106.07
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross;
    float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
                          9020
8884
        883.93
                 fGross.
                          9021
8885
        106.07
                 fTax
                          9022
8886
        132 59
                 fTip1
                          9023
8887
        159.11
                 fTip2
                          9024
8888
        179.79
                 fTip3
8889
```

```
Orders: 10

Total price = 990.00

Gross price = 883.93

Sales tax = 106.07

Tips: 132.59, 159.11, 179.79
```



```
int main ()
    int nDate;
    int nOrders;
    float fPrice:
    float fGross;
    float fTax;
    float fTip1, fTip2, fTip3;
    // printf ("Date: ");
    // scanf ("%d", &nDate):
    printf ("Orders: ");
    scanf ("%d", &nOrders):
    fPrice = computeTotal (nOrders);
   printf ("Total price = %.2f\n", fPrice);
   fGross = computeGross (fPrice);
   printf ("Gross price = %.2f\n", fGross);
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
    computeTips (fGross, &fTip1, &fTip2,
                &fTip3):
    printf ("Tips: %.2f, %.2f, %.2f\n",
            fTip1, fTip2, fTip3);
   return 0;
```

```
main()
8881
          ?
                 nDate
8882
         10
                 nOrders.
8883
        990.0
                 fPrice
                          9020
8884
        883.93
                 fGross.
                          9021
8885
        106.07
                 fTax
                          9022
8886
        132 59
                 fTip1
                          9023
8887
        159.11
                 fTip2
                          9024
8888
        179.79
                 fTip3
8889
```

```
Orders: 10

Total price = 990.00

Gross price = 883.93

Sales tax = 106.07

Tips: 132.59, 159.11, 179.79
```



```
int main ()
    int nDate;
                                                   8881
    int nOrders;
                                                   8882
    float fPrice:
    float fGross:
                                                   8883
    float fTax;
                                                                          9020
    float fTip1, fTip2, fTip3;
                                                   8884
                                                                          9021
                                                   8885
    // printf ("Date: ");
                                                                          9022
    // scanf ("%d", &nDate):
                                                   8886
                                                                          9023
    printf ("Orders: ");
                                                   8887
    scanf ("%d", &nOrders):
                                                                          9024
                                                   8888
    fPrice = computeTotal (nOrders);
                                                   8889
    printf ("Total price = %.2f\n", fPrice);
    fGross = computeGross (fPrice);
    printf ("Gross price = %.2f\n", fGross);
                                                  Screen Output:
    fTax = computeTax (fPrice);
    printf ("Sales tax = %.2f\n", fTax);
                                                   Orders: 10
                                                   Total price = 990.00
    computeTips (fGross, &fTip1, &fTip2,
                                                   Gross price = 883.93
                 &fTip3):
                                                   Sales tax = 106.07
    printf ("Tips: %.2f, %.2f, %.2f\n",
                                                    Tips: 132.59, 159.11, 179.79
            fTip1, fTip2, fTip3);
    return 0;
```

returnType functionName (type1 param1, type2 param2, ...)

S. B. Chu (DLSU) User-defined functions October 15, 2020 34 | 35

returnType functionName (type1 param1, type2 param2, ...)

• void displayDividers ()

S. B. Chu (DLSU) User-defined functions October 15, 2020 34 | 35

returnType functionName (type1 param1, type2 param2, ...)

- void displayDividers ()
- float computeTax (float fTotal)

User-defined functions October 15, 2020

returnType functionName (type1 param1, type2 param2, ...)

- void displayDividers ()
- float computeTax (float fTotal)
- void displayDetails (int nDate, int nOrders)

S. B. Chu (DLSU) User-defined functions October 15, 2020

34 | 35

returnType functionName (type1 param1, type2 param2, ...)

- void displayDividers ()
- float computeTax (float fTotal)
- void displayDetails (int nDate, int nOrders)

