

SUB ROUTINES and FUNCTIONS

The manager of Smiley's Pizza Parlor would like a program to calculate each customers' bills. The program should be written so that the user enters the data at the keyboard and the total bill is then displayed. Pizza prices are based on the following:

Size:

6-inch personal	\$5.00
10-inch small	\$8.50
12-inch regular	\$10.25
16-inch large	\$14.50

Cost of toppings:

6-inch personal	\$.50
10-inch small	\$.75
12-inch regular	\$1.00
16-inch large	\$1.50

Extra cheese:

6- or 10-inch	\$1.00
12- 14-inch	\$2.00

In addition, a 9% state sales tax must be added to the bill.

Input:

Selections should be made from a menu similar to the following:

Welcome to Smiley's Pizza Parlor

- 1) 6-inch personal pizza
- 2) 10-inch small pizza
- 3) 12-inch regular pizza
- 4) 16-inch large pizza

Enter the number (1 - 4) corresponding to the size pizza:

Enter the number of toppings:

Would you like extra cheese (Y/N):

Processing Requirements:

Your MAIN program will need to contain a number of statements to DECLARE the following SUB ROUTINES/FUNCTIONS:

- 1) Displaying the menu.
- 2) Calculating the basic cost.
- 3) Adding any toppings and/or cheese.
- 4) Displaying the total bill including tax.

Your MAIN program should contain only two executable statement, CLS and the CALL to the SUB ROUTINE/FUNCTION that outputs the menu. The menu SUB ROUTINE/FUNCTION should in turn CALL the next SUB ROUTINE/FUNCTION, and so on.

Each SUB ROUTINE/FUNCTION should pass the appropriate arguments (by reference or by value, determined by the programmer) to each CALLED SUB ROUTINE/FUNCTION. All SUB ROUTINES/FUNCTIONS should continue CALLing all the necessary SUB ROUTINES/FUNCTIONS until your program is finished.

The first two values (size and number of toppings) can be placed in string variables. The VAL function can then determine whether they are valid integers (note: VAL returns a value of zero if they are not valid numbers). In addition your program will need to validate that the size is in the range of 1 to 4.

When asking whether the customer wants extra cheese, your program should obtain only the first letter of the response and convert it to uppercase. This will enable your program to work properly even if the user enters a word (YES, Yes, yes, NO, ...).

Output:

```
Your total order is:    $##.##  
Tax:                   $##.##  
Your total is:         $##.##
```

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THANK YOU FOR COMING TO SIMLEY'S PIZZA
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