Quiz 2

Problem Solving in C
(CSCE 105, Summer 2006)
URL: http://www.cse.unl.edu/~cstrope/csce105su06/

(20 points)
14th July, 2006

Name :
Course No : **CSCE105**

1. (5 points)

   In the following table, specify which of the identifiers are (a) C reserved words, (b) standard identifiers, (c) conventionally used as constant macro names, (d) other valid identifiers, and (e) invalid identifiers:

Identifier	(a, b, c, d, or e)
void	
MAX_LEN	
part#2	
my_name	
return	
#insert	
time	
printf	
Int	
sqrt	

2. (5 points)
   Given the constants and the variable declarations

   ```
   #define PI 3.14
   #define MAX_I 1000
   ...
   double x, y;
   int a, b, i;
   ```

   indicate which of the following statements are valid, and find the value stored by each
   valid statement. Also indicate which are invalid and why. Assume that a is 3, b is 4,
   and y is −1.0.

Statement	Value **OR** invalid and why it is invalid
`i = a % b;`	
`x = a / b;`	
`x = PI / y;`	
`x = a % (a / b);`	
`i = (989 - MAX_I) / a;`	
`x = a * y / b / y;`	
`i = b % a;`	
`i = b / 0;`	
`x = a / y;`	
`i = -a / b;`	

3. (10 points)

A retail store would like to install a system that allows shoppers to check the cost of an item after taxes have been added. Below, write a complete program that will prompt the user to enter the cost of the item, scan the cost in, calculate the cost after tax using the equation

$$Price = Cost \times 0.065 \ ,$$

and output the cost of the item to the user.

Answer Box: