Name: KEY   **Id#**

<div align="center">

ICS 103, Term 092

Computer Programming in C

Quiz# 1

Date: Tuesday, March 9, 2010

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Q1. Fill the blank in each of the following:

(1) RAM is called random access memory <u>because its access time is the same regardless of the accessed address</u>.

(2) Hard disk is an example of <u>secondary</u> memory.

(3) Assembly language is <u>the set of instructions of a processor represented using symbolic names for operations, registers and variable names</u>.

(4) Compilers translate <u>high level language to assembly or machine language</u>.

(5) Software development is based on the following steps: <u>specify problem requirements</u>, <u>analyze the problem</u>, <u>design the algorithm to solve the problem</u>, <u>implement the algorithm</u>, <u>test and verify the completed program</u>, <u>maintain and update the program</u>.

(6) <u>Algorithm</u> is a list of steps for solving a problem.

(7) <u>Pseudocode</u> is a combination of English phrases and language constructs to describe algorithm steps.

(8) <u>Flowchart</u> is a diagram that shows the step-by-step execution of a program.

(9) Preprocessor directives are <u>commands that give instructions to the C preprocessor.</u>

(10)   The #include directive is used to <u>include other source files into your source file</u>.

(11)   The #define directive instructs the preprocessor to <u>replace each occurrence of a text by a particular constant value before compilation.</u>

(12)   Anything between the symbols /* */ will be considered a comment, even if they span multiple lines.

(13)   Anything after the symbol // and before the end of the line is considered a comment.

(14)   In C language, the data type **int** is used for representing integers, the data type **double** is used for representing real numbers and the data type **char** is used for representing characters.

(15)   Fill the following table:

Placeholder	Variable Type	Function Use
%c	char	printf/scanf
%d	int	printf/scanf
%f	double	printf
%lf	double	scanf

(16)   To read an integer value and store it in variable **num**, the following statement is used:

scanf("%d", &num);

Q2. Show the output of the following program in the space provided below it. Each square corresponds to one space.

```c
#include <stdio.h>
int main(void) {
    int i = 678;
    double j = 569.987;
    printf("%4.1f %9.2f\n",j,j);
    printf("%2d %7d",i,i);
return 0;
}
```

5	7	0	.	0				5	6	9	.	9	9						
6	7	8					6	7	8										