Name: KEY Id#

ICS 103, Term 092

Computer Programming in C

Quiz# 1

 Date: Tuesday, March 9, 2010

# **Q1.** Fill the blank in each of the following:

## RAM is called random access memory because its access time is the same regardless of the accessed address.

## Hard disk is an example of secondary memory.

## Assembly language is the set of instructions of a processor represented using symbolic names for operations, registers and variable names.

##  Compilers translate high level language to assembly or machine language.

## Software development is based on the following steps: specify problem requirements, analyze the problem, design the algorithm to solve the problem, implement the algorithm, testand verify the completed program, maintain and update the program.

## Algorithm is a list of steps for solving a problem.

## Pseudocode is a combination of English phrases and language constructs to describe algorithm steps.

## Flowchart is a diagram that shows the step-by-step execution of a program.

## Preprocessor directives are commands that give instructions to the C preprocessor.

## The #include directive is used to include other source files into your source file.

## The #define directive instructs the preprocessor to replace each occurrence of a text by a particular constant value before compilation.

## Anything between the symbols /\* \*/ will be considered a comment, even if they span multiple lines.

## Anything after the symbol // and before the end of the line is considered a comment.

## 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.

## Fill the following table:

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

## 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.

#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** |  |  |  |  |  |  |  |  |  |  |