Name: KEY Id#

ICS 103, Term 132

Computer Programming in C

Quiz# 1

 Date: Tuesday, Feb. 11, 2014

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

## Hard disk is an example of secondary memory.

## The set of instructions that can be executed by the CPU represented in binary format is called machine language while when represented using symbolic codes it is called assembly language.

## The main advantages of programming in High level languages like C are that high level languages are portable and it is easier to write and maintain.

## A compiler turns the Source File into an Object File while a linker turns the Object File into an Executable.

## Software development process is composed of the following steps:

## Specify problem requirements

## Analyze the problem

## Design the algorithm to solve the problem

## Implement the algorithm

## Test and verify the completed program

## Maintain and update the program

## To read an integer and a real number and store them in variables x and y respectively, the following statement is used:

## scanf(“%d%lf”, &x, &y);

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

**Q2.** Find the values of the following expressions.

|  |  |
| --- | --- |
| Expression | Value |
| (double) (7/2) | **3.0** |
| 40/3/2.0 | **6.5** |
| (int)6.6/(double)3 | **2.0** |
| 5+7/2\*2.0 | **11.0** |
| int x= 5.924; |  **x = 5** |
| double y= 10/4; |  **y = 2.0** |

# **Q3.** In the grid below, assume that each square represents a space and each row represents a line on the screen. Show how the output of the following program will be displayed.

#include <stdio.h>

int main(void) {

 double i=99.869;

 int j=-124;

 printf("%6.0f%8d\n",i,j);

 printf("%5.1f%9.5f\n",i,i);

 return 0;

}

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **1**  | **0** | **0** |  |  |  |  | **-** | **1** | **2** | **4** |  |  |  |  |  |
|  | **9** | **9** | **.** | **9** |  | **9** | **9** | **.** | **8** | **6** | **9** | **0** | **0** |  |  |  |  |  |