Name: KEY Id#

ICS 103, Term 132

Computer Programming in C

Quiz# 2

Date: Sunday, March 9, 2014

**Q1.** Consider the following program. What will be the output for the different values of x typed by the user?

|  |  |
| --- | --- |
| Value of x typed  by user | Program output |
| **1** | **3** |
| **2** | **1** |
| **3** | **13** |
| **5** | **8** |
| **6** | **9** |

#include <stdio.h>

int main()

{

int x;

printf("Enter a value for x: ");

scanf("%d", &x);

switch(x) {

case 1: x=x+2;

break;

case 3: x=x+1;

case 5: if(x==4)

x=x+6;

case 6: x=x+3;

break;

default : x=x-1;

}

printf("%d\n",x);

return 0;

}

**Q2.** Consider the following program. What will be the output for the different values of x typed by the user?

#include <stdio.h>

|  |  |
| --- | --- |
| Value of x typed  by user | Program output |
| **3** | **F** |
| **7** | **B** |
| **20** | **C** |
| **10** | **D** |
| **9** | **A** |

int main() {

int x;

printf("Enter a value for x >");

scanf("%d",&x);

if(x >= 5 ) {

if(x < 10){

if(x > 8)

printf("A");

else

printf("B");

}

else{

if ( x >= 20)

printf("C");

else

printf("D");

}

}

else

printf("F");

return 0;

}

**Q3.** Write a function that receives the Cartesian coordinates of two points (x1,y1) and (x2,y2) and computes their distance computed by the following formula:

Assume that the input and output arguments are of type double.

double distance (double x1, double y1, double x2, double y2)

{

return sqrt( pow(x2-x1,2) + pow(y2-y1,2));

}