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 typedby 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 typedby 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:

$$distance=\sqrt{\left(x2-x1\right)^{2}+\left(y2-y1\right)^{2}}$$

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));

}