Name: 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** |  |
| **2** |  |
| **3** |  |
| **5** |  |
| **6** |  |

#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** |  |
| **7** |  |
| **20** |  |
| **10** |  |
| **9** |  |

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.