

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?

```
#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;
}
```

Value of x typed by user	Program output
1	
2	
3	
5	
6	

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

```
#include <stdio.h>

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;
}
```

Value of x typed by user	Program output
3	
7	
20	
10	
9	

Q3. Write a function that receives the Cartesian coordinates of two points (x_1, y_1) and (x_2, y_2) and computes their distance computed by the following formula:

$$\text{distance} = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

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