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 ;

scanf("%d",&x);
switch(x) {
   case 4:
   case 2: if(x==4)
             x=x-3;
           x=x+1;
   case 5:
   case 0: x=x+2;
   case 3:
   case 1: x=x+3;
           break;
   default : x=x+4;
  }
  printf("%d\n",x);
return 0;}
```

Value of x typed By user	Program output
4	
2	
5	
0	
15	

Q2. Fill the column of **printed output** for the corresponding input. The program is run 5 times and each time the input is shown in the first column.

```
#include <stdio.h>
int main () {
int x,y;
scanf("%d%d",&x,&y);
if(x<20)
  if(y>=10)
     if (x>= 15)
        printf("A");
     else
        printf("B");
  else
     if(y >= 0)
       printf("C");
     else
       printf("D");
else
  printf ("E");
return 0;
```

INPUT		PRINTED OUTPUT
15	-3	
15	10	
19	5	
20	10	
14	10	

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

$$(\mathrm{xm}, \mathrm{ym}) = (\frac{\mathrm{x1} + \mathrm{x2}}{2}, \frac{\mathrm{y1} + \mathrm{y2}}{2})$$

Assume that the input arguments are of type double.