

Name: KEY

Id#

ICS 103, Term 092

Computer Programming in C

Quiz# 4

Date: Tuesday, May 23, 2010

Q1. Find the output of each of the following programs:

Program	Output
<p>(i) <span style="float: right;">5 points</span></p> <pre>#include &lt;stdio.h&gt;  int test(int a[], int t, int n) {     int i=0, j=-1, k=0;      while (!k &amp;&amp; i &lt; n) {         if (a[i] == t)k = 1;         else i++;     }     if (k) j=i;      return j; }  int main(void) {     int x[]={10, 5, 15, 20, 1, 20};      printf("%d\n", test(x, 20, 6));      return 0; }</pre>	<p>The program will search for the target value 20 in the array and will return the index where it is first found. Thus, it will print: 3</p>

(ii)

5 points

```
#include <stdio.h>

int main(void)
{
    int x[]={2, 5, 3, 4, 1};
    int i, j, k, l;

    for (i=0; i<4; i++) {
        k=i;
        for (j=i+1; j<5; j++)
            if (x[j] > x[k])
                k = j;
        l=x[i]; x[i]=x[k]; x[k]=l;
    }

    for (i=0; i<5; i++)
        printf("%d ", x[i]);

    return 0;
}
```

The program will sort the array in descending order. Thus, it will print:  
5 4 3 2 1