Name: Section: Rollno:

ESC101: Fundamentals of Computing(Minor Quiz 2)

4th March, 2014

Total Number of Pages: 2 Total Points 10

Question	Points	Score
1	10	
Total:	10	

Instructions

1. Read these instructions carefully.
2. Write you name, section and roll number on all the pages of the answer book.
3. Write the answers cleanly in the space provided. There is space left on the back of the answer book for rough work.
4. Do not exchange question books or change the seat after obtaining question paper.
5. Using pens (blue/black ink) and not pencils. Do not use red pens for answering.
6. Even if no answers are written, the answer book has to be returned back with name and roll number written.

Helpful hints

1. The questions are *not* arranged according to the increasing order of difficulty. Do a quick first round where you answer the easy ones and leave the difficult ones for the subsequent rounds.
2. For fill in the blanks type of questions, read the comments in the code. They usually have helpful remarks.

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Question 1. (10 points) Consider the program given below.

```
#include <stdio.h>
int f2(int input[],  int output[], int n, int k)
{
    int i, j = 0;
    for (i = 0; i < n; i++) {
        if (input[i] < 0) {
            break;
        }
        if (input[i] % k == 0) {
            continue;
        }
        output[j] = input[i];
        j = j + 1;
    }
    return j;
}

const int MAX = 10;
int main()
{
    int a[MAX], b[MAX], len;
    int k;

    /* Initialization */
    for (k = 0; k < MAX; k++) {
        a[k] = -1;
        b[k] = -1;
    }

    scanf("%d", &len);
    for (k = 0; k < len; k++) {
        scanf("%d", &a[k]);
    }

    /* Compute and output the result */
    printf("%d: ", f2(a, b, len, 4));
    for (k = 0; k < MAX; k++) {
        printf("%d ",b[k]);
    }

    return 0;
}
```

What is the output of the program for the following input?

Input: `7 13 16 17 26 -12 -31 16`

Output:

Solution: 3: 13 27 26 -1 -1 -1 -1 -1 -1 -1