

ESC101: Fundamentals of Computing (Minor Quiz 2)

23 August, 2016

Total Number of Pages: 4

Total Points 20

Question 1. (8 points) Consider the program given below.

```
1 #include <stdio.h>
2 int main()
3 {
4     int n,n1,n2,x=0;
5     scanf("%d %d",&n1,&n2);
6     while(n1< n2)
7     {
8         if(n1%2!=0)
9         {
10             n=n1;
11             while(n!=0)
12             {
13                 x = x+n%10;
14                 n = n/10;
15             }
16         }
17         n1++;
18     }
19     printf("%d\n",x);
20     return 0;
21 }
```

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

Name:

Section:

Rollno:

Input: 10 15

Output:

Solution: 6

Input: 13 15

Output:

Solution: 4

Input: 40 50

Output:

Solution: 45

Input: 7 9

Output:

Solution: 7

Name:

Section:

Rollno:

Question 2. (12 points) Consider the program given below.

```
1 #include <stdio.h>
2 int main()
3 {
4     int x,y,z;
5     scanf("%d %d %d",&x,&y,&z);
6     x = x+1;
7     switch(y)
8     {
9         case 1:
10        case 3:
11        case 5:
12        case 7:
13        case 8:
14        case 10: if(x>31){ x = 1; y=y+1;} break;
15        case 4:
16        case 6:
17        case 9:
18        case 11: if(x>30) {x = 1; y=y+1;}
19        case 2: if(
20                    (
21                    (
22                    (z%400 == 0) ||
23                    (z%4 == 0 && z%100!=0)
24                    )
25                    && x>28
26                )
27                || x>29)
28                { y = y+1; x=1;} break;
29        default : if(x>31) { x=1; y=1; z=z+1;}break;
30    }
31    printf("%d %d %d\n",x,y,z);
32    return 0;
33 }
```

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

Name:

Section:

Rollno:

Input: 28 2 2016

Output:

Solution: 1 3 2016

Input: 29 11 2013

Output:

Solution: 1 12 2013

Input: 31 12 2016

Output:

Solution: 1 1 2017

Input: 29 4 2017

Output:

Solution: 1 5 2017