Final Assessment Test -1

Q1 : Looking at the below code, write down the final values of A0, A1, ...An.

```
A0 = dict(zip(('a','b','c','d','e'),[1,2,3,4,5]))
A1 = xrange(10)
A2 = sorted([i for i in A1 if i in A0])
A3 = sorted([A0[s] for s in A0])
A4 = [i for i in A1 if i in A3]
A5 = {i:i*i for i in A1}
A6 = [[i,i*i] for i in A1]
```

Q2: Write a program to display the below pattern

```
0 0 0 0 0 0 0
0 1 1 1 1 1 0
0 1 1 1 1 1 0
0 0 0 0 0 0 0
```

Q3: write a program to display the below pattern:

```
        *
      *   *
     *       *
    *           *
   *               *
  *                   *
 *                       *
  *                   *
   *               *
    *           *
     *       *
      *   *
        *
```

Q4: Write a program to display the below pattern (Floyd's Triangle):

```
1
2 3
4 5 6
7 8 9 10
```

Q5: Write a program which takes the below Input and returns the corresponding output, without using calender module:

Input: 31 Jan 2016

Output: It is 31st day of the year 2016

Input: 22 Feb 2016

Output: It is 53rd day of the year 2016

Input: 1 Mar 2016

Output: It is 61st day of the year 2016

HINT: 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 0th

Q6: If the user enters 5 10-digit mobile numbers in either of the below three formats,

```
07895462130
919875641230
+9195969878
```

process it and display them in the sorted order.

```
+91 78954 62130
+91 91959 69878
+91 98756 41230
```

HINT: +91 XXXXX XXXXX is the typical format of 10-digit mobile number