DeerCoders Season 2 – Session 1

**Question**

Write a program in C to find out the 50 random numbers (integer) between 10 and 40 (inclusive). Set of random numbers **must be different on each run**, so use CPU time as seed value for random number generation ( hint: srand(time(NULL)) ).

Now find out the duplicate numbers in the list with its frequency (number of repetition). Your program must have below outputs in **same order**:

a)      List of random numbers in a row with proper spacing.

b)      Frequency table (or list) of duplicate numbers with its frequency as shown in example below (Note: numbers must be in ascending order and **only duplicate numbers** should be listed).

c)       Finally show all the random numbers in ascending order.

# Sample Output

## Random Numbers

13 32 24 22 32 18 17 25 40 35 31 19 27 18 23 11 40 36 24 30 30 31 26 23 38 15 34

 39 22 37 35 22 34 18 34 16 28 29 39 32 11 33 24 37 13 20 22 35 29 23

## R.N. --> Frequency

11 --> 2

13 --> 2

18 --> 3

22 --> 4

23 --> 3

24 --> 3

29 --> 2

30 --> 2

31 --> 2

32 --> 3

34 --> 3

35 --> 3

37 --> 2

39 --> 2

40 --> 2

## Sorted Random Numbers

11 11 13 13 15 16 17 18 18 18 19 20 22 22 22 22 23 23 23 24 24 24 25 26 27 28 29

 29 30 30 31 31 32 32 32 33 34 34 34 35 35 35 36 37 37 38 39 39 40 40

**Date: October 29, 2014**