

**North South University**  
**Department of Electrical and Computer Engineering**  
**CSE 215L: Programming Language II Lab**

**Lab – 3: Conditional Statement, Loop**

**Objective:**

- To learn to use conditional statements (if, else, switch case)
- To learn the usage of loops (for, while, do-while)

1. Generate a random integer n between 5 and 20 (inclusive). Use **for** loop to print all integers from 0 to n separated by a space. To generate a random integer between min and max range:

```
int n = (int) (min+Math.random()*(max-min+1))
```

**Sample Output:**

Random integer: 7  
0 1 2 3 4 5 6 7

2. Print the following

```
1 2 3 4 5
1 2 3 4
1 2 3
1 2
1
```

3. Write a program which will use while loop to print all the integers between 100 and 150 which are divisible by 8 in descending order.

Output: 144 136 128 120 112 104

4. Generate a random **int** between 1990 and 2020. Then print it check if it's a leap year or not.

Note: A leap year must satisfy **any or both** of the following conditions:

Divisible by 400

Divisible by 4 and not divisible by 100

**Sample output:**

2015: false

5. Print the following pattern:

```
*
+++
*****
+++++++
*****
```