# Programming Fundamentals (PF)

# Assignment # 3

**Max Points:** 50                    **Due Date:** Friday, Dec 18, 2020, 11 a.m.

## Carefully read the following instructions!

- It should be clear that your assignment would not get any credit if the assignment is submitted after the due date. No assignment will be accepted after the due date.

- Strict action will be taken if submitted solution is copied from any other student.

- If you people find any mistake or confusion in assignment (Question statement), please consult before the deadline. After the deadline no queries will be entertained in this regard.

- For any query, feel free to email at: **basit.jasani@nu.edu.pk**

- **Submission:** Submission will only be accepted through GOOGLE CLASSROOM. Submit all your codes in a single folder name it as your Student ID **"KXX-XXXX"**. The folder will contain a single C program files as Q1.c with proper commenting of the code.

**Q1.**   Assume that the 100 academic journals records are stored in a structure array as shown below:

| ID | Title | Journal | Issue | Year | startPage | endPage | Author |
|---|---|---|---|---|---|---|---|
| 1 | Cuckoo Hashing | JAlg | 51 | 2004 | 121 | 133 | Robert Tarjan |
| 2 | Deterministic Dictionaries | JAlg | 41 | 2001 | 69 | 85 | Robert Lafore |
| .. | .. | .. | .. | .. | .. | .. | .. |
| 100 | What Godel missed | SICO | 51 | 2008 | 1 | 5 | Paul Bailey |

**Hint**: struct Article {int ID; char Title[30]; char Journal[50];….};

**Note**: "No global variables allowed. Use appropriate data types, return types and function arguments if not explicitly mentioned."

a) Write a function named "Check_Author(…)". This function searches the data for all the articles authored by "Robert Tarjan" and changes the author to "Robert Lafore". If no such articles exist the function must display "Not Found".

b) Write a function named "Article_Count(…)". This function displays all the records for which the totals pages are 50 or above and year 2000 or above.

c) Write a function named "Journal_Information(…). This function will display all the information of journals "JAlg".

d) Write a **recursive** function named "display(…)" that will print all the information of each journal stored in a structure array.