

# Digital Engineering Homework #3

## 1. Write C-Program for generating data with CRC code

– When your program is executed,

- it asks a user to input 4digit Generation code.

Please, type 4-bit generation code: 1001

- the program will read a data.txt file which has 10 digit binary number.



- Using the 10-digit binary number in the data.txt file, your program generates CRC code for the data (10-digit binary number in the data. txt) using the generation code.
- Once your program completes the process, the program makes a output file and write the data attached with CRC.

– Upload your source .c file to classroom

– I will run your c file and if your C program does not work well, the score will be 0 regardless of your program code itself.

– Name the source file like Class\_StudentID\_HW3.c (for example, 501\_B1011010\_HW3.c)



- Add the followings at the top (the first line) of the code  
#define \_CRT\_SECURE\_NO\_WARNINGS
- Initialize all variables before using them.
- Use Visual Studio 2022 with MSVC (Microsoft Visual C++) compiler (not C89/90/11/17)

Due Date: 23:00 on May 9th 2025

No excuse for late submission will be accepted.