## **Project 1: Scanner**

#### 1-Input:

Multiple lines of code written in TINY language syntax

#### 2-Output:

List of (Tokenvalue, Tokentype)

#### Example:

х	Id
:=	assign operator
4	number

#### 3- Deliverables:

- 1- Executable
- 2- GUI Desktop program
- 3- Snap shots of your program
- 4- Code files

#### 4-Teams:

Groups of up to 5 students can work in this project together. (Min 2)

## 5-Deadline:

# Sunday 4/6/2021

### 6-Other Notes:

The program can be written in any language that can run on windows as an exe without the need of installing any third party tools.

# **Code Sample**

```
/* Sample program in Tiny language - computes factorial*/
int main()
{
    int x;
    read x; /*input an integer*/
    if x > 0 then /*don't compute if x <= 0 */
        int fact := 1;
        repeat
            fact := fact * x;
            x := x - 1;
        until x = 0
        write fact; /*output factorial of x*/
    end
    return 0;
}</pre>
```